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(12) **United States Patent**
Haas et al.(10) **Patent No.:** **US 9,326,513 B2**(45) **Date of Patent:** **May 3, 2016**(54) **FUNGICIDAL COMPOSITIONS**(75) Inventors: **Ulrich Johannes Haas**, Stein (CH); **Dietrich Hermann**, Stein (CH); **Gabriel Didier Scalliet**, Stein (CH); **Kurt Nebel**, Stein (CH); **Long Lu**, Shanghai (CN); **Qiang Lu**, Shanghai (CN); **Jianzhong Yang**, Shanghai (CN); **Thomas James Hoffman**, Stein (CH); **Renaud Beaudegnies**, Stein (CH); **Werner Zambach**, Stein (CH); **Olivier Jacob**, Stein (CH)(73) Assignee: **Syngenta Participations AG**, Basel (CH)

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2007/0155802 A1* 7/2007 Labourdette **A01N 37/52**
514/355

FOREIGN PATENT DOCUMENTS

WO 2008/101682 8/2008
WO WO2008101682 A2* 8/2008 **C07D 213/16**
WO 2009/088103 7/2009
WO WO2009088103 A1* 7/2009 **A01N 43/40**

OTHER PUBLICATIONS

International Search Report dated Jul. 19, 2012 for International Patent Application No. PCT/CN2012/073665.

* cited by examiner

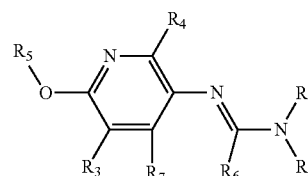
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(57) **ABSTRACT**

The present invention provides a composition comprising a combination of components A) and B), wherein component A) is a compound of formula (I) and the component (B) is a further fungicide, insecticide or herbicide.

(I)

**16 Claims, No Drawings**

FUNGICIDAL COMPOSITIONS

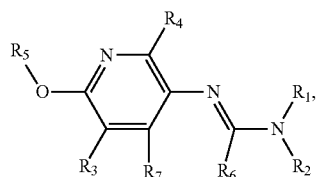
RELATED APPLICATION INFORMATION

This application is a 371 of International Application No. PCT/CN2012/073665, filed 9 Apr. 2012, which claims priority to International Application No. PCT/CN2011/084016, filed 14 Dec. 2011, the contents of which are incorporated herein by reference.

The present invention relates to novel fungicidal compositions which comprise fungicidally active pyridylamidine compounds for the treatment of phytopathogenic diseases of useful plants, especially phytopathogenic fungi, and to a method of controlling phytopathogenic diseases on useful plants.

Certain phenylamidine derivatives are described in WO2008/101682 as microbicidally active ingredients in pesticides.

The present invention provides a composition comprising a combination of components A) and B), wherein component A) is a compound of formula (I)



wherein

R₁ and R₂ are each independently selected from hydrogen, C₁-C₄ alkyl, C₃-C₄ alkenyl, C₃-C₄ alkynyl, (R₁₀)carbonyl and (R₁₀)oxycarbonyl;

or R₁ and R₂ together with the nitrogen atom to which they are attached form a 5- or 6 membered cyclic group which may be saturated or unsaturated and may contain a further heteroatom selected from S or O;

R₃ represents hydrogen, halogen, cyano, nitro, mercapto, hydroxy, —C(=S)NH₂, —SF₅, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ cycloalkyl, amino, C₁-C₂ alkylamino, di(C₁-C₆ alkyl)amino, a 5-membered heterocycle containing 1-4 nitrogen atoms, piperidino, morpholino, thiomorpholino, formyl, hydroxycarbonyl, C₂-C₇ alkoxycarbonyl, C₂-C₇ haloalkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ haloalkenyloxycarbonyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfanyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ hydroxyalkyl, phenyl or benzyl wherein the phenyl and benzyl are optionally substituted by one or more groups independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonyl;

R₄ represents hydrogen, halogen, cyano, amino, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfanyl, C₁-C₄ alkylsulfonyl, methylamino and dimethylamino;

R₅ is hydrogen, C₁-C₁₂ alkyl, C₃-C₁₂ alkenyl, C₃-C₁₂ alkynyl, C₁-C₁₂ alkylsulfonyl, C₂-C₁₂ alkenylsulfonyl, phenylsulfonyl or benzylsulfonyl, or is C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkylsulfanyl, C₂-C₁₂ alkenylsulfanyl, phenylsulfanyl or benzylsulfanyl mono- to polysubstituted by substituents independently

selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonyl; or

R₅ is formyl, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₃-C₁₂ alkynylcarbonyl, C₄-C₁₂ cycloalkylcarbonyl, benzylcarbonyl, phenylcarbonyl, C₂-C₁₂ alkoxycarbonyl, C₄-C₁₂ alkenyloxycarbonyl, C₄-C₁₂ alkynyloxycarbonyl, C₄-C₁₂ cycloalkoxycarbonyl, benzylloxycarbonyl or phenoxycarbonyl, or is C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₃-C₁₂ alkynylcarbonyl, C₄-C₁₂ cycloalkylcarbonyl, benzylcarbonyl, phenylcarbonyl, C₂-C₁₂ alkoxycarbonyl, C₄-C₁₂ alkenyloxycarbonyl, C₄-C₁₂ alkynyloxycarbonyl, C₄-C₁₂ cycloalkoxycarbonyl, benzylloxycarbonyl or phenoxycarbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

R₅ is (R₅₁)(R₅₂)(R₅₃)Si—, (R₅₁)(R₅₂)(R₅₃)Si—(C₁-C₁₂alkyl)-, (R₅₁)(R₅₂)(R₅₃)Si—(C₃-C₈cycloalkyl)-, (R₅₄O)(R₅₅O)(R₅₆O)Si—, (R₅₄O)(R₅₅O)(R₅₆O)Si—(C₁-C₁₂alkyl)- or (R₅₄O)(R₅₅O)(R₅₆O)Si—(C₃-C₈cycloalkyl)-; or

R₅ is C₁-C₆alkyl-B—C₁-C₁₂alkyl-, C₂-C₆alkenyl-B—C₁-C₁₂alkyl-, C₂-C₆alkynyl-B—C₁-C₁₂alkyl-, C₃-C₈cycloalkyl-B—C₁-C₁₂alkyl-, benzyl-B—C₁-C₁₂alkyl-, phenyl-B—C₁-C₁₂alkyl-, C₁-C₆alkyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkynyl-, C₂-C₁₂alkenyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phenyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₁₂cycloalkyl- or phenyl-B—C₃-C₁₂cycloalkyl-, wherein the group B is selected from —C(=O)—, —C(=S)—, —C(=NOR₅₉)—, —C(R₆₀)—, —NO—, —ON=C(R₆₀)—, —O—C(=O)—, —C(=O)—, —O—, —S—, —S(=O)—, —S(=O)₂—, —S(=O)(=NR₁₃)—, —S(=O)(R₁₄)—N—, —N=S(=O)(R₁₄)—, —N(R₆₂)—C(=O)—, —C(=O)—N(R₆₂)—, —N(R₆₂)—SO₂— or —SO₂—N(R₆₂)—; or

R₅ is C₁-C₆alkyl-B—C₁-C₁₂alkyl-, C₂-C₆alkenyl-B—C₁-C₁₂alkyl-, C₂-C₆alkynyl-B—C₁-C₁₂alkyl-, C₃-C₈cycloalkyl-B—C₁-C₁₂alkyl-, benzyl-B—C₁-C₁₂alkyl-, phenyl-B—C₁-C₁₂alkyl-, C₁-C₆alkyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkenyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phenyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₁₂cycloalkyl-, phenyl-B—C₃-C₁₂cycloalkyl-, all of which, in turn, are mono- to poly-substituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, formyl, C₂-C₆ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonyl; or

R₅ is A-, A-(C₁-C₆alkyl)-, A-O—(C₁-C₆alkyl)-, A-(C₃-C₈alkenyl)-, A-O—(C₄-C₆alkenyl)-, A-(C₃-C₆alkynyl)-, A-O—(C₄-C₆alkynyl)-, A-(C₃-C₈cycloalkyl)- or A-O—(C₃-C₈cycloalkyl)-;

wherein A is a three- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic, partially saturated or fully saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the three- to ten-membered ring system to be itself mono- or polysubstituted

A1) by substituents independently selected from the group consisting of

halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, carboxy, =O, =S, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₈ halocycloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₈ cycloalkyloxy, benzyl, benzyloxy, phenyl and phenoxy, where the benzyl, benzyloxy, phenyl and phenoxy, in turn, may be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

A2) by substituents independently selected from the group consisting of (R₁₄)S(=O)(=NR₁₃)—, (R₁₄)(R₁₅)S(=O)=N—, —Si(R₅₁)(R₅₂)(R₅₃), —NR₅₇R₅₈, —C(=O)NR₅₇R₅₈, C(=S)NR₅₇R₅₈, HC(=NOR₅₉)—, (C₁-C₆alkyl)C(=NOR₅₉)—, (C₁-C₆haloalkyl)C(=NOR₅₉)—, (C₁-C₆alkyl)C(=NOR₅₉)C₁-C₆alkyl-, (C₁-C₆haloalkyl)C(=NOR₅₉)C₁-C₆alkyl-, N(C₁-C₆alkyl)aminosulfonyl and N,N-di(C₁-C₆alkyl)aminosulfonyl; or

A3) by substituents independently selected from the group consisting of

formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₃-C₇ alkenylcarbonyl, C₃-C₇ haloalkenylcarbonyl, C₄-C₉ cycloalkylcarbonyl, C₄-C₉ halocycloalkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₂-C₇ haloalkoxy carbonyl, C₃-C₇ alkenyloxy carbonyl, C₃-C₇ alkynyloxy carbonyl, C₄-C₉ cycloalkoxy carbonyl, C₂-C₇ alkylthiocarbonyl and benzyloxy carbonyl, and benzyloxy carbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

A4) by substituents independently selected from the group consisting of hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl, phenyl, =C(R³⁶)₂, =N—OH, =N—O—C₁-C₄-alkyl, =N—O—C₃-C₄ alkenyl, =N—O—C₃-C₄ alkynyl, =N—O—C₁-C₄ haloalkyl, =N—O—C₃-C₄ haloalkenyl, =N—O-benzyl and =N—O-phenyl, wherein the =N—O-benzyl and =N—O-phenyl are optionally substituted by one or more group selected from the group consisting of halogen, methyl, halomethyl; or

R₅ is —N=C(R₈)(R₉); or

R₅ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇-alkylcarbonyl, C₂-C₇-alkoxy carbonyl, C₄-C₇-alkenyloxy carbonyl, C₄-C₇-alkynyloxy carbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl,

C₁-C₆ alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

R₆ is selected from hydrogen and SH;

R₇ is hydrogen, halogen or C₁-C₄ alkyl;

R₈ and R₉, independently from each other, are hydrogen, halogen, cyano, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkoxy, formyl, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, carboxy, C₂-C₁₂ alkoxy carbonyl and C₄-C₁₂ alkenyloxy carbonyl, or C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkoxy, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₂-C₁₂ alkoxy carbonyl and C₄-C₁₂ alkenyloxy carbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or R₈ and R₉ together from a C₂-C₈ alkylene bridge which may optionally be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, C₁-C₆ alkyl and C₁-C₆ haloalkyl; or R₈ and R₉, independently from each other, are the groups A-, A-O— or A-(C₁-C₆alkyl)-;

R₁₀ is H, C₁-C₄ alkyl, C₂-C₄ alkenyl or C₁-C₄ haloalkyl;

R₁₃ is hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, phenyl and benzyl, or is phenyl and benzyl mono- to polysubstituted by halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl or C₁-C₆ alkoxy;

R₁₄ and R₁₅, independently of each other, are C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl independently of each other, substituted by substituents selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

R₅₁, R₅₂, R₆₃, independently of each other, are halogen, cyano, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₃-C₈ cycloalkyl, C₅-C₈ cycloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, benzyl or phenyl;

R₅₄, R₅₅, R₆₆, independently of each other, are C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₈ cycloalkyl, C₃-C₆ alkynyl, benzyl or phenyl;

R₅₇ and R₆₈, independently of each other, are hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, phenyl or benzyl, where phenyl or benzyl for their part may be mono- to polysubstituted on the phenyl ring by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy, or R₅₇ and R₅₈ together with their interconnecting nitrogen atom are aziridino, azetidino, pyrazolino, pyrazolidino, pyrrolino, pyrrolidino, imidazolino, imidazolidino, triazolino, tetrazolino, piperazino, piperidino, morpholino, thiomorpholino, each of which, in turn, may be mono- or polysubstituted by substituents selected from the group consisting of methyl, halogen, cyano;

R₅₉ is hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, benzyl and phenyl, and benzyl and phenyl mono- to polysubstituted by halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl or C₁-C₆ alkoxy;

R₆₀ is hydrogen, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

R₆₂ is hydrogen, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₃-C₆ alkenyl, C₃-C₆ alky-

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nyl, benzyl or phenyl, or benzyl or phenyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

each R^{36'} is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

and agronomically acceptable salts/metallic complexes/metalloidal complexes/isomers/structural isomers/stereoisomers/diastereoisomers/enantiomers/tautomers/N-oxides of those compounds;

and

component B) is a strobilurin fungicide, a sterol biosynthesis inhibitor fungicide, a triazole fungicide, or a pro-triazole fungicide, or a DMI fungicide, or a SDHI fungicide, or a compound selected from the group consisting of Chlorothalonil, Fludioxonil, Cyprodinil, Mandipropamid, Fluazinam, Procymedone, Carbendazim, Abamectin, Clothianidin, Emamectin benzoate, Imidacloprid, Tefluthrin, Mefenoxam, Orocymedone, Thiamethoxam, Lambda-cyhalothrin, Gamma-cyhalothrin, Profenofos, Lufenuron, Diflubenzuron, Cypermethrin, Novaluron, Bifenthrin, Methomyl, Chlopyrifos, Methamidophos, Endosulfan, Betacyfluthrin, Triflumuron, Teflubenzuron, Sulcotrione, Acephat, Glyphosate, Glufosinate, Mesotrione, Bicyclopyrone, Tembotrione, Sulcotrione, Sulcotrione, Auxins, Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol, Acibenzolar-S-methyl, Methyl-Jasmonate, Cis-Jasmone, Manganese, Cyflufenamid, Tebufloquin and Copper.

A further aspect of present invention provides a composition comprising a combination of components A) and B) in a synergistically effective ratio between the component A) and component B).

A further aspect of the present invention provides a method of controlling phytopathogenic diseases on useful plants or on propagation material thereof, which comprises applying to the useful plants, the locus thereof or propagation material thereof a combination of components A) and B) in as synergistically effective amount and ratio between the component A) and component B).

A further aspect of the present invention relates to novel compounds according to formula (I).

A further aspect of the present invention relates to novel intermediates to provide compounds according to formula (I).

Preferably, component B is a strobilurin fungicide, a sterol biosynthesis inhibitor fungicide, a triazole fungicide, a pro-triazole fungicide, a DMI fungicide, a SDHI fungicide, or is a compound selected from Chlorothalonil, Fludioxonil, Cyprodinil, Mandipropamid, Mefenoxam, Orocymedone, Fluazinam, Procymedone, Carbendazim, Abamectin, Clothianidin, Emamectin benzoate, Imidacloprid, Tefluthrin, Thiamethoxam, Lambda-cyhalothrin, Gamma-cyhalothrin, Profenofos, Lufenuron, Diflubenzuron, Cypermethrin, Novaluron, Bifenthrin, Methomyl, Chlopyrifos, Methamidophos, Endosulfan, Betacyfluthrin, Triflumuron, Teflubenzuron, Sulcotrione, Acephat, Glyphosate, Glufosinate, Mesotrione, Bicyclopyrone, Tembotrione, Sulcotrione, Auxins, Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol, Acibenzolar-S-methyl, Methyl-Jasmonate, Cis-Jasmone, Manganese and Copper.

Preferably, component B is a strobilurin fungicide, a sterol biosynthesis inhibitor fungicide, a triazole fungicide, a pro-triazole fungicide, a DMI fungicide, a SDHI fungicide, or is a compound selected from the group consisting of Chlorothalonil, Fludioxonil, Cyprodinil, Mandipropamid, Mefenoxam, Orocymedone, Fluazinam, Carbendazim, Thiamethoxam, Glyphosate, 2,4-D, Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol and cis-Jasmone.

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In one group of mixtures, component B is a strobilurin fungicide.

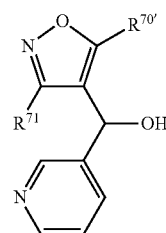
In another group of mixtures, component B is a Sterol biosynthesis inhibitor

In another group of mixtures, component B is a triazole fungicide or a protiazole compound.

In another group of mixtures, component B is a DMI fungicide.

In another group of mixtures, component B is a SDHI fungicide.

In another group of mixtures, component B is a compound of formula (III)



(III)

wherein R^{70'} is phenyl, which is unsubstituted or substituted with 1, 2 or 3 substituents selected from halogen, haloalkyl, haloalkoxy and cyano, and;

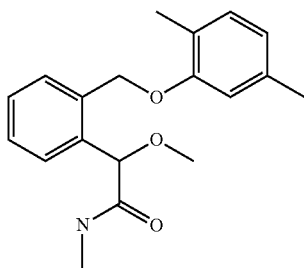
R^{71'} is phenyl, which is unsubstituted or substituted with 1, 2 or 3 substituents selected from halogen, haloalkyl, haloalkoxy and cyano.

Preferred compounds of formula (III) are (S)-[3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol and 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl-pyridin-3-yl-methanol.

In another group of mixtures, component B is selected from the group consisting of Chlorothalonil, Fludioxonil, Cyprodinil, Mandipropamid, Fluazinam, Procymedone, Carbendazim, Abamectin, Clothianidin, Emamectin benzoate, Imidacloprid, Tefluthrin, Mefenoxam, Orocymedone, Thiamethoxam, Lambda-cyhalothrin, Gamma-cyhalothrin, Profenofos, Lufenuron, Diflubenzuron, Cypermethrin, Novaluron, Bifenthrin, Methomyl, Chlopyrifos, Methamidophos, Endosulfan, Betacyfluthrin, Triflumuron, Teflubenzuron, Sulcotrione, Acephat, Glyphosate, Glufosinate, Mesotrione, Bicyclopyrone, Tembotrione, Sulcotrione, Auxins (e.g. 2,4-D and MCPA), Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol, Acibenzolar-S-methyl, Methyl-Jasmonate, Cis-Jasmone, Manganese and Copper, preferably from the group consisting of Chlorothalonil, Fludioxonil, Cyprodinil, Fenpropidin, Mandipropamid, Mefenoxam, Orocymedone, Fluazinam, Procymedone, Carbendazim, Abamectin, Clothianidin, Emamectin benzoate, Imidacloprid, Tefluthrin, Thiamethoxam, Lambda-cyhalothrin, Gamma-cyhalothrin, Profenofos, Lufenuron, Diflubenzuron, Cypermethrin, Novaluron, Bifenthrin, Methomyl, Chlopyrifos, Methamidophos, Endosulfan, Betacyfluthrin, Triflumuron, Teflubenzuron, Sulcotrione, Acephat, Glyphosate, Glufosinate, Mesotrione, Bicyclopyrone, Tembotrione, Sulcotrione, Auxins, Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol, Acibenzolar-S-methyl, Methyl-Jasmonate, Cis-Jasmone, Manganese and Copper, more preferably from the group consisting of Chlorothalonil, Fludioxonil, Cyprodinil, Fenpropidin, Mandipropamid, Mefenoxam, Orocymedone, Fluazinam, Carbendazim, Thiamethoxam, Glyphosate, 2,4-D, Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol and cis-Jasmone.

In a preferred embodiment the component B) is a compound selected from Chlorothalonil, Fludioxonil, Cyprodinil, Fenpropidin, Mandipropamid, Fenpropimorph, Fluazinam, Procymedone, Carbendazim, Abamectin, Clothianidin, Emamectin benzoate, Imidacloprid, Tefluthrin, Mefenoxam, Orocymedone, Thiamethoxam, Lambda-cyhalothrin, Gamma-cyhalothrin, Profenofos, Lufenuron, Diflubenzuron, Cypermethrin, Novaluron, Bifenthrin, Methomyl, Chlopyrifos, Methamidophos, Endosulfan, Betacyfluthrin, Triflumuron, Teflubenzuron, Acephat, Glyphosate, Glufosinate, Mesotrione, Bicyclopyrone, Tembotrione, Sulcotrione, 2,4-D, MCPA, Trinexapac-ethyl, Prohexadione-Ca, Paclobutrazol, Acibenzolar-S-methyl, Methyl-Jasmonate, Cis-Jasmone, Manganese, Copper, Coumoxystrobin, Dicloaminostrobin, Flufenoxystrobin, Pyrametostrobin, Pyraoxystrobin, Trifloxystrobin, Azoxystrobin, Pyraclostrobin, Picoxystrobin, Jiaxiangjunzhi, Enoxastrobin, Triclopyricarb, the compound of formula II, Cyproconazole, Difenconazole, Metconazole, Propiconazole, Epoxiconazole, Tebuconazole, Flutriafol, Ipconazole, prothioconazole, (S)-[3-(4-Chloro-2-fluorophenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol, 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol, Pyrisoxazole, 3-(Difluoromethyl)-N-methoxy-1-methyl-N-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1H-pyrazole-4-carboxamide, N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, Isopyrazam, Sedaxane, Boscalid, Fluxapyroxad, Penthiopyrad, Penflufen, Bixafen and Fluopyram.

The term strobilurin fungicide is well known to the person skilled in the art, and includes, for example, Coumoxystrobin, Dicloaminostrobin, Flufenoxystrobin, Pyrametostrobin, Pyraoxystrobin, Trifloxystrobin, Azoxystrobin, Pyraclostrobin, Picoxystrobin, Jiaxiangjunzhi, Enoxastrobin, Triclopyricarb, Fluoxastrobin, Dimoxystrobin, Fenaminostrobin and the compound of formula (II). Preferred strobilurin fungicides are Azoxystrobin, Pyraclostrobin and Picoxystrobin. Even more preferred strobilurin fungicides are Azoxystrobin and Pyraclostrobin.



The term sterol biosynthesis inhibitor fungicide is well known to the person skilled in the art, and includes, for example, Spiroxamine, Fenpropimorph, Tridemorph, Fenpropidin, Fenhexamid, Terbinafine, Naftifine

The term triazole fungicide is well known to the person skilled in the art, and includes, for example, Cyproconazole, Difenconazole, Metconazole, Propiconazole, Epoxiconazole, Tebuconazole, Flutriafol, Ipconazole and 1-(2-chlorophenyl)-2-(1-chlorocycloprop-1-yl)-3-(1,2,4-triazol-1-yl)propan-2-ol [CAS number 120983-64-4]. Preferred triazole fungicide compounds are Cyproconazole, Difenconazole, Metconazole and Tebuconazole. Even more preferred is Cyproconazole.

The term pro-triazole fungicide is well known to the person skilled in the art and includes, for example, prothioconazole.

The term DMI fungicides is well known to the person skilled in the art and includes, for example, (S)-[3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol, 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)isoxazol-4-yl]-pyridin-3-yl-methanol and Pyrisoxazole. Preferred DMI fungicides are (S)-[3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol and 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol.

The term SDHI fungicide is well known to the person skilled in the art and includes, for example, N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, Isopyrazam, Sedaxane, Boscalid Fluxapyroxad, Penthiopyrad, Penflufen, Bixafen, Fluopyram, 3-(Difluoromethyl)-N-methoxy-1-methyl-N-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1H-pyrazole-4-carboxamide, Preferred SDHI fungicides are N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, Isopyrazam, 3-(Difluoromethyl)-N-methoxy-1-methyl-N-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1H-pyrazole-4-carboxamide and Fluxapyroxad.

The term Auxins is well known to the person skilled in the art and includes, for example, 2,4-D, MCPA and Dicamba

In a further preferred embodiment the component B is Chlorothalonil. In a further preferred embodiment the component B is Fludioxonil. In a further preferred embodiment the component B is Cyprodinil. In a further preferred embodiment the component B is Fenpropidin. In a further preferred embodiment the component B is Mandipropamid. In a further preferred embodiment the component B is Fluazinam. In a further preferred embodiment the component B is Procymedone. In a further preferred embodiment the component B is Carbendazim. In a further preferred embodiment the component B is Abamectin. In a further preferred embodiment the component B is Clothianidin. In a further preferred embodiment the component B is Emamectin benzoate. In a further preferred embodiment the component B is Imidacloprid. In a further preferred embodiment the component B is Tefluthrin. In a further preferred embodiment the component B is Mefenoxam. In a further preferred embodiment the component B is Orocymedone. In a further preferred embodiment the component B is Thiamethoxam. In a further preferred embodiment the component B is Lambda-cyhalothrin. In a further preferred embodiment the component B is Gamma-cyhalothrin. In a further preferred embodiment the component B is Profenofos. In a further preferred embodiment the component B is Lufenuron. In a further preferred embodiment the component B is Diflubenzuron. In a further preferred embodiment the component B is Cypermethrin. In a further preferred embodiment the component B is Novaluron. In a further preferred embodiment the component B is Bifenthrin. In a further preferred embodiment the component B is Methomyl. In a further preferred embodiment the component B is Chlopyrifos. In a further preferred embodiment the component B is Methamidophos. In a further preferred embodiment the component B is Endosulfan. In a further preferred embodiment the component B is Betacyfluthrin. In a further preferred embodiment the component B is Triflumuron. In a further preferred embodiment the component B is Teflubenzuron. In a further preferred embodiment the component B is Acephat. In a further preferred embodiment the component B is Glyphosate. In a further preferred embodi-

ment the component B is Glufosinate. In a further preferred embodiment the component B is Mesotrione. In a further preferred embodiment the component B is Bicyclopyrone. In a further preferred embodiment the component B is Tembotrione. In a further preferred embodiment the component B is Sulcotrione. In a further preferred embodiment the component B is 2,4-D. In a further preferred embodiment the component B is MCPA. In a further preferred embodiment the component B is Trinexapac-ethyl. In a further preferred embodiment the component B is Prohexadione-Ca. In a further preferred embodiment the component B is Paclobutrazol. In a further preferred embodiment the component B is Acibenzolar-5-methyl. In a further preferred embodiment the component B is Methyl-Jasmonate. In a further preferred embodiment the component B is Cis-Jasmone. In a further preferred embodiment the component B is Manganese. In a further preferred embodiment the component B is Copper. In a further preferred embodiment the component B is Cyflufenamid. In a further preferred embodiment the component B is Tebufloquin. In a further preferred embodiment the component B is Coumoxystrobin. In a further preferred embodiment the component B is Dicloaminostrobin. In a further preferred embodiment the component B is Flufenoxystrobin. In a further preferred embodiment the component B is Pyrametostrobin. In a further preferred embodiment the component B is Pyraoxystrobin. In a further preferred embodiment the component B is Trifloxystrobin. In a further preferred embodiment the component B is Azoxystrobin. In a further preferred embodiment the component B is Pyraclostrobin. In a further preferred embodiment the component B is Picoxystrobin. In a further preferred embodiment the component B is Jiexiangjunzhi. In a further preferred embodiment the component B is Enoxastrobin. In a further preferred embodiment the component B is Triclopyricarb. In a further preferred embodiment the component B is Fluoxastrobin. In a further preferred embodiment the component B is Dimoxystrobin. In a further preferred embodiment the component B is Fenaminostrobin. In a further preferred embodiment the component B is the compound of formula II. In a further preferred embodiment the component B is Cyproconazole. In a further preferred embodiment the component B is Difenoconazole. In a further preferred embodiment the component B is Metconazole. In a further preferred embodiment the component B is Propiconazole. In a further preferred embodiment the component B is Epoxiconazole. In a further preferred embodiment the component B is Tebuconazole. In a further preferred embodiment the component B is Flutriafol. In a further preferred embodiment the component B is Ipconazole. In a further preferred embodiment the component B is 1-(2-chlorophenyl)-2-(1-chlorocycloprop-1-yl)-3-(1,2,4-triazol-1-yl)propan-2-ol [CAS number 120983-64-4]. In a further preferred embodiment the component B is prothioconazole. In a further preferred embodiment the component B is (S)-[3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)isoxazol-4-yl]-pyridin-3-yl-methanol. In a further preferred embodiment the component B is 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl-pyridin-3-yl-methanol. In a further preferred embodiment the component B is Pyrisoxazole. In a further preferred embodiment the component B is 3-(difluoromethyl)-N-methoxy-1-methyl-N-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1H-Pyrazole-4-carboxamide. In a further preferred embodiment the component B is N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide. In a further preferred embodiment the component B is Isopyrazam. In a further preferred embodiment the component B is Sedaxane. In a further preferred

embodiment the component B is Boscalid. In a further preferred embodiment the component B is Fluxapyroxad. In a further preferred embodiment the component B is Penthiopyrad. In a further preferred embodiment the component B is Penflufen. In a further preferred embodiment the component B is Bixafen. In a further preferred embodiment the component B is Fluopyram. In a further preferred embodiment the component B is 1-(2-chlorophenyl)-2-(1-chlorocycloprop-1-yl)-3-(1,2,4-triazol-1-yl)propan-2-ol.

The active ingredient mixture according to the invention may bring about the additive enhancement of the spectrum of action with respect to the phytopathogen to be controlled that may in principle be expected but achieves a synergistic effect which extends the range of action of the component (A) and of the component (B) in two ways. Firstly, the rates of application of the component (A) and of the component (B) may be lowered whilst the action remains equally good. Secondly, the active ingredient mixture may still achieve a high degree of phytopathogen control even where the two individual components have become totally ineffective in such a low application rate range. This allows, on the one hand, a substantial broadening of the spectrum of phytopathogens that can be controlled and, on the other hand, increased safety in use.

However, besides the actual synergistic action with respect to fungicidal activity, the pesticidal compositions according to the invention may also have further surprising advantageous properties which can also be described, in a wider sense, as synergistic activity. Examples of such advantageous properties that may be mentioned are: a broadening of the spectrum of fungicidal activity to other phytopathogens, for example to resistant strains; a reduction in the rate of application of the active ingredients; synergistic activity against animal pests, such as insects or representatives of the order Acarina; a broadening of the spectrum of pesticidal activity to other animal pests, for example to resistant animal pests; adequate pest control with the aid of the compositions according to the invention, even at a rate of application at which the individual compounds are totally ineffective; advantageous behaviour during formulation and/or upon application, for example upon grinding, sieving, emulsifying, dissolving or dispensing; increased storage stability; improved stability to light; more advantageous degradability; improved toxicological and/or ecotoxicological behaviour; improved characteristics of the useful plants including: emergence, crop yields, more developed root system, tillering increase, increase in plant height, bigger leaf blade, less dead basal leaves, stronger tillers, greener leaf colour, less fertilizers needed, less seeds needed, more productive tillers, earlier flowering, early grain maturity, less plant verse (lodging), increased shoot growth, improved plant vigor, and early germination; or any other advantages familiar to a person skilled in the art.

Substituents at a nitrogen atom are always different from halogen. A hydroxy, mercapto or amino substituent is not to be placed on an α -carbon relative to a heteroatom of a core fragment.

The alkyl groups occurring in the definitions of the substituents can be straight-chain or branched and are, for example, methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, iso-butyl, tert-butyl, pentyl, hexyl, heptyl and octyl and their branched isomers. Alkoxy, alkenyl and alkynyl radicals are derived from the alkyl radicals mentioned. The alkenyl and alkynyl groups can be mono- or polyunsaturated.

The cycloalkyl groups occurring in the definitions of the substituents are, for example, cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl.

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Halogen is generally fluorine, chlorine, bromine or iodine, preferably fluorine, bromine or chlorine. This also applies, correspondingly, to halogen in combination with other meanings, such as haloalkyl or haloalkoxy.

Haloalkyl groups preferably have a chain length of from 1 to 6 carbon atoms. Haloalkyl is, for example, fluoromethyl, difluoromethyl, trifluoromethyl, chloromethyl, dichloromethyl, trichloromethyl, 2,2,2-trifluoroethyl, 2-fluoroethyl, 2-chloroethyl, pentafluoroethyl, 1,1-difluoro-2,2,2-trichloroethyl, 2,2,3,3-tetrafluoroethyl, 2,2,2-trichloroethyl, 5,5,5-trifluoropentan-1-yl, 5,5-difluoro-pentan-1-yl, 6,6,6-trifluorohexan-1-yl, 6,6-difluoro-hexan-1-yl, heptafluoro-prop-2-yl and 2-fluoro-prop-2-yl; preferably trichloromethyl, difluorochloromethyl, difluoromethyl, trifluoromethyl and dichlorofluoromethyl.

Suitable haloalkenyl groups are alkenyl groups which are mono- di- or trisubstituted by halogen, halogen being fluorine, chlorine, bromine and iodine and in particular fluorine and chlorine, for example 2,2-difluoro-1-methylvinyl, 3-fluoropropenyl, 3-chloropropenyl, 3-bromopropenyl, 2,3,3-trifluoropropenyl, 2,3,3-trichloropropenyl and 4,4,4-trifluorobut-2-en-1-yl.

Suitable haloalkynyl groups are, for example, alkynyl groups which are mono- or polysubstituted by halogen, halogen being bromine, iodine and in particular fluorine and chlorine, for example 3-fluoropropynyl, 3-chloropropynyl, 3-bromopropynyl, 3,3,3-trifluoropropynyl and 4,4,4-trifluorobut-2-yn-1-yl.

Alkoxy is, for example, methoxy, ethoxy, propoxy, i-propoxy, n-butoxy, isobutoxy, sec-butoxy and tert-butoxy; preferably methoxy and ethoxy. Halogenalkoxy is, for example, fluoromethoxy, difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy, 1,1,2,2-tetrafluoroethoxy, 2-fluoroethoxy, 2-chloroethoxy, 2,2-difluoroethoxy and 2,2,2-trichloroethoxy; preferably difluoromethoxy, 2-chloroethoxy and trifluoromethoxy.

Alkoxy carbonyl is, for example, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, isobutoxycarbonyl, sec-butoxycarbonyl or tert-butoxycarbonyl; preferably methoxycarbonyl or ethoxycarbonyl. Haloalkoxy groups preferably have a chain length of from 1 to 6 carbon atoms. Haloalkoxy is, for example, fluoromethoxy, difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy, 1,1,2,2-tetrafluoroethoxy, 2-fluoroethoxy, 2-chloroethoxy, 2,2-difluoroethoxy and 2,2,2-trichloroethoxy; preferably difluoromethoxy, 2-chloroethoxy and trifluoromethoxy. Alkylthio groups preferably have a chain length of from 1 to 6 carbon atoms.

Alkoxyalkyl is, for example, methoxymethyl, methoxyethyl, ethoxymethyl, ethoxyethyl, n-propoxymethyl, n-propoxyethyl, isopropoxymethyl or isopropoxyethyl.

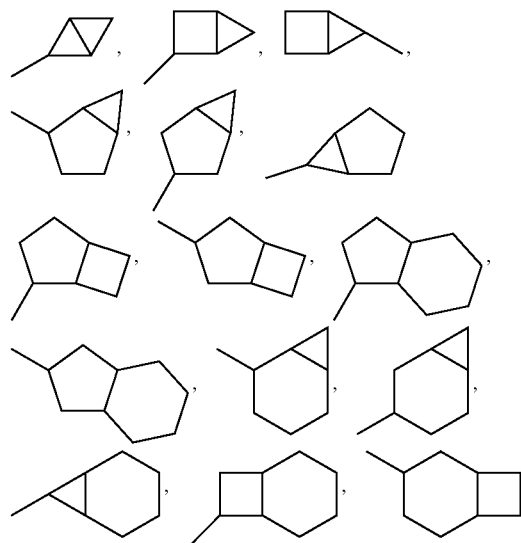
Alkylthio is, for example, methylthio, ethylthio, propylthio, isopropylthio, n-butylthio, isobutylthio, sec-butylthio or tert-butylthio, preferably methylthio and ethylthio. Alkylsulfinyl is, for example, methylsulfinyl, ethylsulfinyl, propylsulfinyl, isopropylsulfinyl, n-butylsulfinyl, isobutylsulfinyl, sec-butylsulfinyl, tert-butylsulfinyl; preferably methylsulfinyl and ethylsulfinyl. Alkylsulfonyl is, for example, methylsulfonyl, ethylsulfonyl, propylsulfonyl, isopropylsulfonyl, n-butylsulfonyl, isobutylsulfonyl, sec-butylsulfonyl or tert-butylsulfonyl; preferably methylsulfonyl or ethylsulfonyl.

C₂-C₆ alkylcarbonyl is, for example, methylcarbonyl, ethylcarbonyl, propylcarbonyl, isopropylcarbonyl, n-butylcarbonyl, isobutylcarbonyl, sec-butylcarbonyl, tert-butylcarbonyl or n-pentylcarbonyl and their branched isomers, preferably methylcarbonyl and ethylcarbonyl. Haloalkylcarbonyl radicals are derived from the alkyl radicals mentioned.

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In the context of the present invention "mono- to polysubstituted" in the definition of the substituents, means typically, depending on the chemical structure of the substituents, monosubstituted to seven-times substituted, preferably monosubstituted to five-times substituted, more preferably mono-, double- or triple-substituted.

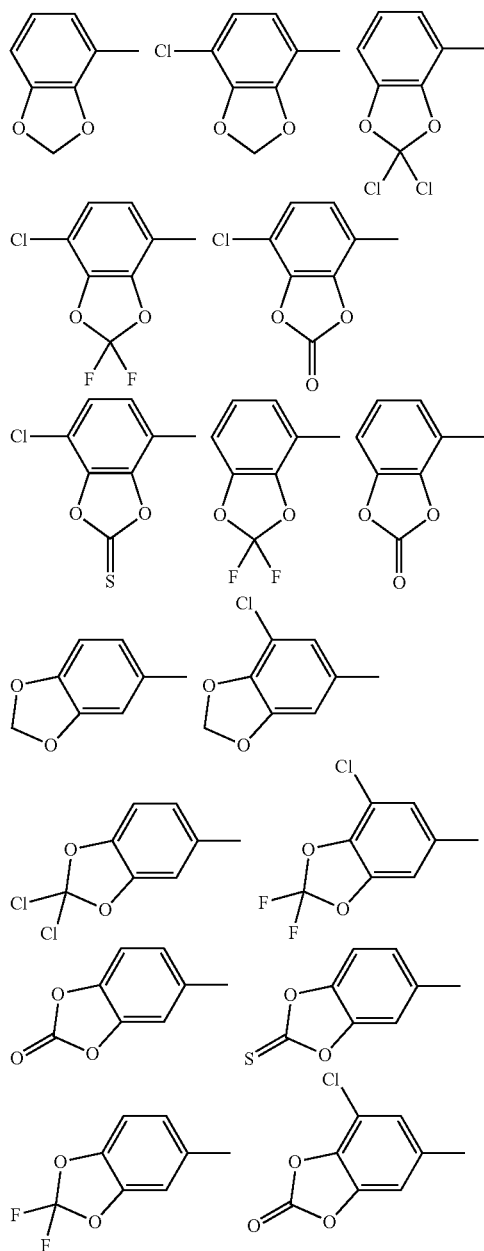
According to the present invention, a three- to ten-membered monocyclic or fused bicyclic ring system which may be aromatic, partially saturated or fully saturated is, depending of the number of ring members, for example, selected from the group consisting of



cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, where said cycloalkyl groups for their part may be preferably unsubstituted or substituted by C₁-C₆ alkyl or halogen, or is phenyl, benzyl, naphthyl or the following heterocyclic groups: pyrrol; pyridyl; pyrazolyl; pyrimidyl; pyrazinyl; imidazolyl; thiazolyl; quinazolinyl; furyl; oxadiazolyl; indolizyl; pyran; isobenzofuranyl; thienyl; naphthyridinyl; (1-methyl-1H-pyrazol-3-yl)-; (1-ethyl-1H-pyrazol-3-yl)-; (1-propyl-1H-pyrazol-3-yl)-; (1H-pyrazol-3-yl)-; (1,5-dimethyl-1H-pyrazol-3-yl)-; (4-chloro-1-methyl-1H-pyrazol-3-yl)-; (1H-pyrazol-1-yl)-; (3-methyl-1H-pyrazol-1-yl)-; (3,5-dimethyl-1H-pyrazol-1-yl)-; (3-isoxazolyl)-; (5-methyl-3-isoxazolyl)-; (3-methyl-5-isoxazolyl)-; (5-isoxazolyl)-; (1H-pyrazol-2-yl)-; (1-methyl-1H-pyrazol-2-yl)-; (1H-pyrazol-1-yl)-; (1-methyl-1H-pyrazol-3-yl)-; (2-furanyl)-; (5-methyl-2-furanyl)-; (3-furanyl)-; (5-methyl-2-thienyl)-; (2-thienyl)-; (3-thienyl)-; (1-methyl-1H-imidazol-2-yl)-; (1H-imidazol-2-yl)-; (1-methyl-1H-imidazol-4-yl)-; (1-methyl-1H-imidazol-5-yl)-; (4-methyl-2-oxazolyl)-; (5-methyl-2-oxazolyl)-; (2-oxazolyl)-; (2-methyl-5-oxazolyl)-; (2-methyl-4-oxazolyl)-; (4-methyl-2-thiazolyl)-; (5-methyl-2-thiazolyl)-; (2-thiazolyl)-; (2-methyl-5-thiazolyl)-; (2-methyl-4-thiazolyl)-; (3-methyl-4-isothiazolyl)-; (3-methyl-5-isothiazolyl)-; (5-methyl-3-isothiazolyl)-; (1-methyl-1H-1,2,3-triazol-4-yl)-; (2-methyl-2H-1,2,3-triazol-4-yl)-; (4-methyl-2H-1,2,3-triazol-2-yl)-; (1-methyl-1H-1,2,4-triazol-3-yl)-; (1,5-dimethyl-1H-1,2,4-triazol-3-yl)-; (3-methyl-1H-1,2,4-triazol-1-yl)-; (5-methyl-1H-1,2,4-triazol-1-yl)-; (4,5-dimethyl-4H-1,2,4-triazol-3-yl)-; (4-methyl-4H-1,2,4-triazol-3-yl)-; (4H-1,2,4-triazol-4-yl)-; (5-methyl-1,2,3-oxadiazol-4-yl)-; (1,2,3-oxadiazol-4-yl)-; (3-methyl-1,2,4-oxadiazol-5-yl)-; (5-methyl-1,2,4-oxadiazol-3-yl)-; (4-methyl-3-furazanyl)-; (3-furazanyl)-; (5-methyl-1,2,4-

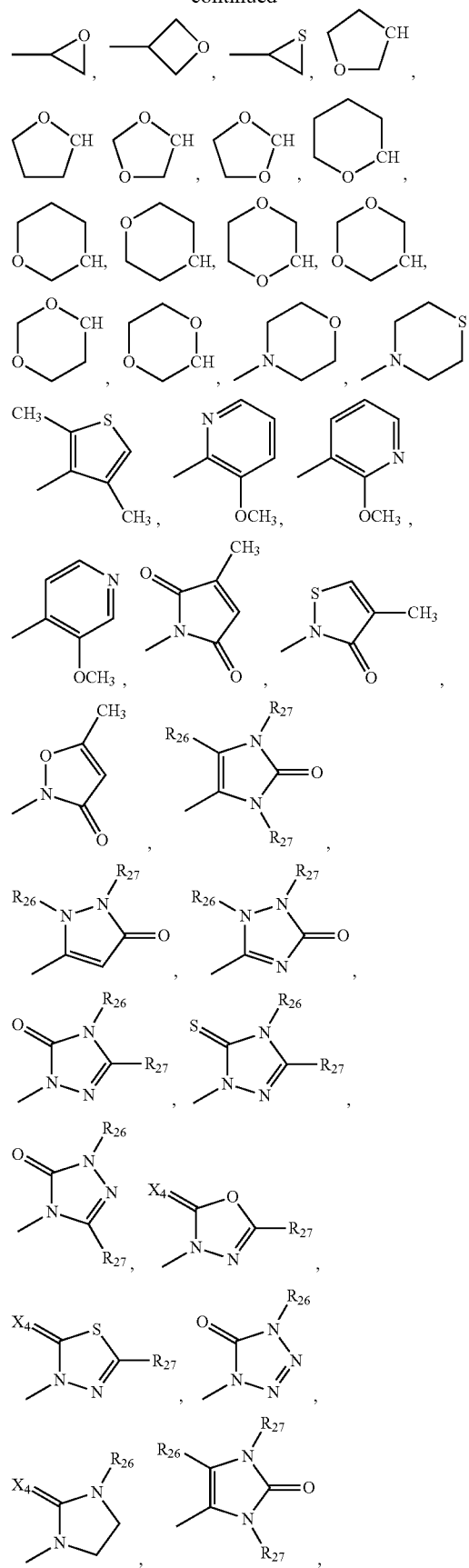
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oxadiazol-2-yl)-; (5-methyl-1,2,3-thiadiazol-4-yl)-; (1,2,3-thiadiazol-4-yl)-; (3-methyl-1,2,4-thiadiazol-5-yl)-; (5-methyl-1,2,4-thiadiazol-3-yl)-; (4-methyl-1,2,5-thiadiazol-3-yl)-; (5-methyl-1,3,4-thiadiazol-2-yl)-; (1-methyl-1H-tetrazol-5-yl)-; (1H-tetrazol-5-yl)-; (5-methyl-1H-tetrazol-1-yl)-; (2-methyl-2H-tetrazol-5-yl)-; (2-ethyl-2H-tetrazol-5-yl)-; (5-methyl-2H-tetrazol-2-yl)-; (2H-tetrazol-2-yl)-; (2-pyridyl)-; (6-methyl-2-pyridyl)-; (4-pyridyl)-; (3-pyridyl)-; (6-methyl-3-pyridazinyl)-; (5-methyl-3-pyridazinyl)-; (3-pyridazinyl)-; (4,6-dimethyl-2-pyrimidinyl)-; (4-methyl-2-pyrimidinyl)-; (2-pyrimidinyl)-; (2-methyl-4-pyrimidinyl)-; (2-chloro-4-pyrimidinyl)-; (2,6-dimethyl-4-pyrimidinyl)-; (4-pyrimidinyl)-; (2-methyl-5-pyrimidinyl)-; (6-methyl-2-pyrazinyl)-; (2-pyrazinyl)-; (4,6-dimethyl-1,3,5-triazin-2-yl)-; (4,6-dichloro-1,3,5-triazin-2-yl)-; (1,3,5-triazin-2-yl)-; (4-methyl-1,3,5-triazin-2-yl)-; (3-methyl-1,2,4-triazin-5-yl)-; (3-methyl-1,2,4-triazin-6-yl)-;

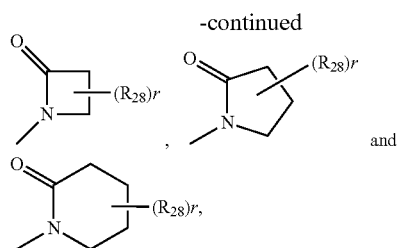


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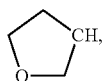


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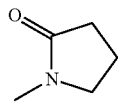


wherein each R_{26} is methyl, each R_{27} and each R_{28} are independently hydrogen, C_1 - C_3 alkyl, C_1 - C_3 alkoxy, C_1 - C_3 alkylthio or trifluoromethyl, X_4 is oxygen or sulfur and $r=1, 2, 3$ or 4 .

There no free valency is indicated in those definitions, for example as in



the linkage site is located at the carbon atom labelled "CH" or in a case such as, for example,



at the bonding site indicated at the bottom left.

The following substituents definitions, including preferred definitions, may be combined in any combination:

R_1 and R_2 are each independently selected from hydrogen, C_1 - C_4 alkyl, C_3 - C_4 alkenyl, C_3 - C_4 alkynyl, (R_{10}) carbonyl and (R_{10}) oxycarbonyl;

or R_1 and R_2 together with the nitrogen atom to which they are attached form a 5- or 6 membered cyclic group which may be saturated or unsaturated and may contain a further heteroatom selected from S or O.

Preferably, R_1 and R_2 are each independently selected from hydrogen, C_1 - C_4 alkyl, C_3 - C_4 alkenyl and C_3 - C_4 alkynyl;

or R_1 and R_2 together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine.

More preferably, R_1 and R_2 are each independently selected from hydrogen or C_1 - C_4 alkyl;

or R_1 and R_2 together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine.

Even more preferably, R_1 and R_2 are each independently selected from hydrogen or C_1 - C_4 alkyl.

More preferably again, R_1 and R_2 are each C_1 - C_4 alkyl.

More favourably again, R_1 and R_2 are each independently selected from methyl, ethyl and isopropyl.

Yet more favourably, R_1 is methyl and R_2 is selected from methyl, ethyl and isopropyl.

Yet more favourably still, R_1 is methyl and R_2 is selected from ethyl and isopropyl.

Most preferably, R_1 is methyl and R_2 is ethyl.

R_3 represents hydrogen, halogen, cyano, nitro, mercapto, hydroxy, $-C(=S)NH_2$, $-SF_5$, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 cycloalkyl, amino, C_1 - C_2 alkylamino, $di(C_1-C_6alkyl)amino$, a 5-membered heterocycle containing 1-4 nitrogen atoms,

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piperidino, morpholino, thiomorpholino, formyl, hydroxycarbonyl, C_2 - C_7 alkoxycarbonyl, C_2 - C_7 haloalkoxycarbonyl, C_4 - C_7 alkenyloxycarbonyl, C_4 - C_7 haloalkenyloxycarbonyl, C_2 - C_7 alkylcarbonyl, C_2 - C_7 haloalkylcarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylthio, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 haloalkylsulfonyl, C_1 - C_6 hydroxyalkyl, phenyl or benzyl wherein the phenyl and benzyl are optionally substituted by one or more groups independently selected from the group consisting of

halogen, cyano, hydroxy, mercapto, amino, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl and C_1 - C_6 alkylsulfonyl.

Preferably, R_3 represents hydrogen, halogen, cyano, mercapto, hydroxy, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 haloalkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_3 - C_6 cycloalkyl, amino, C_1 - C_2 alkylamino, $di(C_1-C_6alkyl)amino$, pyrrolidino, imidazolino, triazolino, tetrazolino, formyl, C_2 - C_5 alkylcarbonyl, C_2 - C_5 haloalkylcarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylthio, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 haloalkylsulfonyl or C_1 - C_6 hydroxyalkyl.

More preferably, R_3 represents hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, amino, C_1 - C_2 alkylamino, $di(C_1-C_6alkyl)amino$, pyrrolidino, imidazolino, triazolino, formyl, phenyl, C_2 - C_4 alkylcarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl or C_1 - C_6 hydroxyalkyl.

Even more preferably, R_3 represents hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, amino, C_1 - C_2 alkylamino, $di(C_1-C_6alkyl)amino$, pyrrolidino, imidazolino, triazolino, formyl, C_2 - C_4 alkylcarbonyl, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl or C_1 - C_4 haloalkylsulfonyl or C_1 - C_4 hydroxyalkyl.

More preferably again, R_3 represents hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl or C_1 - C_4 alkylsulfonyl.

Favourably, R_3 represents hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl or C_1 - C_4 alkylsulfonyl.

Even more favourably, R_3 represents hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy or C_3 - C_6 cycloalkyl.

More favourably again, R_3 represents hydrogen, halogen, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, cyclopropyl, ethynyl or C_1 - C_4 alkoxy.

Yet more favourably, R_3 is selected from hydrogen, bromine, iodine, methyl, CHF_2 , cyclopropyl, ethynyl and methoxy.

Yet more favourably still, R_3 represents hydrogen, bromine, iodine, methyl, difluoromethyl or methoxy.

Most preferably, R_3 represents bromine or methyl.

R_4 represents hydrogen, halogen, cyano, amino, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_3 - C_6 cycloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, methylamino or dimethylamino.

Preferably, R_4 is selected from hydrogen, fluorine, chlorine, bromine, C_1 - C_4 alkyl, C_1 - C_4 alkenyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_3 - C_6 cycloalkyl.

More preferably, R_4 is selected from fluorine, chlorine, bromine, C_1 - C_4 alkyl, C_1 - C_4 alkenyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_3 - C_6 cycloalkyl.

Even more preferably, R_4 is selected from fluorine, chlorine, methyl, ethyl, ethenyl, propyl, propenyl, isopropyl, iso-

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propenyl, cyclopropenyl, methoxy, ethoxy, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl.

More preferably again, R_4 is selected from methyl, ethyl, methoxy, fluorine and chlorine.

More favourably again, R_4 is selected from methyl, methoxy, fluorine and chlorine.

Most preferably, R_4 is methyl.

In another group of compounds, R_4 is selected from methoxy, fluorine and chlorine.

R_5 is hydrogen, C_1 - C_{12} alkyl, C_3 - C_{12} alkenyl, C_3 - C_{12} alkynyl, C_1 - C_{12} alkylsulfonyl, C_2 - C_{12} alkenylsulfonyl, phenylsulfonyl or benzylsulfonyl, or is C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} alkynyl, C_1 - C_{12} alkylsulfonyl, C_2 - C_{12} alkenylsulfonyl, phenylsulfonyl or benzylsulfonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, C_2 - C_7 alkylcarbonyl, C_2 - C_7 haloalkylcarbonyl, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl and C_1 - C_6 alkylsulfonyl; or

R_5 is formyl, C_2 - C_{12} alkylcarbonyl, C_3 - C_{12} alkenylcarbonyl, C_3 - C_{12} alkynylcarbonyl, C_4 - C_{12} cycloalkylcarbonyl, benzylcarbonyl, phenylcarbonyl, C_2 - C_{12} alkoxycarbonyl, C_4 - C_{12} alkenyloxy carbonyl, C_4 - C_{12} alkynyloxy carbonyl, C_4 - C_{12} cycloalkoxy carbonyl, benzylloxy carbonyl or phenoxycarbonyl, or is C_2 - C_{12} alkylcarbonyl, C_3 - C_{12} alkenylcarbonyl, C_3 - C_{12} alkynylcarbonyl, C_4 - C_{12} cycloalkylcarbonyl, benzylcarbonyl, phenylcarbonyl, C_2 - C_{12} alkoxycarbonyl, C_4 - C_{12} alkenyloxy carbonyl, C_4 - C_{12} alkynyloxy carbonyl, C_4 - C_{12} cycloalkoxy carbonyl, benzylloxy carbonyl or phenoxycarbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl and C_1 - C_6 alkoxy; or

R_5 is $(R_{51})(R_{52})(R_{53})Si-$, $(R_{51})(R_{52})(R_{53})Si-(C_1-C_{12}alkyl)-$, $(R_{51})(R_{52})(R_{53})Si-(C_3-C_8cycloalkyl)-$, $(R_{54}O)(R_{55}O)(R_{56}O)Si-$, $(R_{54}O)(R_{55}O)(R_{56}O)Si-(C_1-C_{12}alkyl)-$ or $(R_{54}O)(R_{55}O)(R_{56}O)Si-(C_3-C_8cycloalkyl)-$; or

R_5 is C_1 - C_6 alkyl-B- C_1 - $C_{12}alkyl$ -, C_2 - C_6 alkenyl-B- C_1 - $C_{12}alkyl$ -, C_2 - C_6 alkynyl-B- C_1 - $C_{12}alkyl$ -, C_3 - C_8 cycloalkyl-B- C_1 - $C_{12}alkyl$ -, benzyl-B- C_1 - $C_{12}alkyl$ -, phenyl-B- C_1 - $C_{12}alkyl$ -, C_1 - C_6 alkyl-B- C_2 - $C_{12}alkenyl$ -, C_2 - C_6 alkenyl-B- C_2 - $C_{12}alkenyl$ -, C_2 - C_6 alkynyl-B- C_2 - $C_{12}alkenyl$ -, C_3 - C_8 cycloalkyl-B- C_2 - $C_{12}alkenyl$ -, benzyl-B- C_2 - $C_{12}alkenyl$ -, phenyl-B- C_2 - $C_{12}alkenyl$ -, C_1 - C_6 alkyl-B- C_2 - $C_{12}alkynyl$ -, C_2 - C_6 alkenyl-B- C_2 - $C_{12}alkynyl$ -, C_2 - C_6 alkynyl-B- C_2 - $C_{12}alkynyl$ -, C_3 - C_8 cycloalkyl-B- C_2 - $C_{12}alkynyl$ -, benzyl-B- C_2 - $C_{12}alkynyl$ -, phenyl-B- C_2 - $C_{12}alkynyl$ -, C_1 - C_6 alkyl-B- C_3 - C_8 cycloalkyl-, C_2 - C_6 alkenyl-B- C_3 - C_8 cycloalkyl-, C_2 - C_6 alkynyl-B- C_3 - C_8 cycloalkyl-, C_3 - C_8 cycloalkyl-B- C_3 - C_8 cycloalkyl-, benzyl-B- C_3 - $C_{12}cycloalkyl$ - or phenyl-B- C_3 - $C_{12}cycloalkyl$ -, wherein the group B is selected from $-C(=O)-$, $-C(=S)-$, $-C(=NOR_{59})-$, $-C(R_{60})=NO-$, $-ON=C(R_{60})-$, $-O-C(=O)-$, $-C(=O)-O-$, $-O-S-$, $-S(=O)-$, $-S(=O)_2-$, $-S(=O)(=NR_{13})-$, $-S(=O)(R_{14})-N-$, $-N=S(=O)(R_{14})-$, $-N(R_{62})-C(=O)-$, $-C(=O)-N(R_{62})-$, $-N(R_{62})-SO_2-$ or $-SO_2-N(R_{62})-$; or

R_5 is C_1 - C_6 alkyl-B- C_1 - $C_{12}alkyl$ -, C_2 - C_6 alkenyl-B- C_1 - $C_{12}alkyl$ -, C_2 - C_6 alkynyl-B- C_1 - $C_{12}alkyl$ -, C_3 - C_8 cycloalkyl-B- C_1 - $C_{12}alkyl$ -, benzyl-B- C_1 - $C_{12}alkyl$ -, phenyl-B- C_1 - $C_{12}alkyl$ -, C_1 - C_6 alkyl-B- C_2 - $C_{12}alkenyl$ -, C_2 - C_6 alkenyl-B- C_2 - $C_{12}alkenyl$ -, C_2 - C_6 alkynyl-B- C_2 - $C_{12}alkenyl$ -, C_3 - C_8 cycloalkyl-B- C_2 - $C_{12}alkenyl$ -, benzyl-B- C_2 - $C_{12}alkenyl$ -, phenyl-B- C_2 -

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$C_{12}alkenyl$ -, C_1 - C_6 alkyl-B- C_2 - $C_{12}alkynyl$ -, C_2 - C_6 alkenyl-B- C_2 - $C_{12}alkynyl$ -, C_2 - C_6 alkynyl-B- C_2 - $C_{12}alkynyl$ -, C_3 - C_8 cycloalkyl-B- C_2 - $C_{12}alkynyl$ -, benzyl-B- C_2 - $C_{12}alkynyl$ -, phenyl-B- C_2 - $C_{12}alkynyl$ -, C_1 - C_6 alkyl-B- C_3 - C_8 cycloalkyl-, C_2 - C_6 alkenyl-B- C_3 - C_8 cycloalkyl-, C_2 - C_6 alkynyl-B- C_3 - C_8 cycloalkyl-, C_3 - C_8 cycloalkyl-B- C_3 - C_8 cycloalkyl-, benzyl-B- C_3 - $C_{12}cycloalkyl$ -, phenyl-B- C_3 - $C_{12}cycloalkyl$ -, all of which, in turn, are mono- to poly-substituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy, formyl, C_2 - C_6 alkylcarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl and C_1 - C_6 alkylsulfonyl; or

R_5 is A-, A-(C_1 - C_6 alkyl)-, A-O-(C_1 - C_6 alkyl)-, A-(C_3 - C_6 alkenyl)-, A-O-(C_4 - C_6 alkenyl)-, A-(C_3 - C_6 alkynyl)-, A-O-(C_4 - C_6 alkynyl)-, A-(C_3 - C_8 cycloalkyl)- or A-O-(C_3 - C_8 cycloalkyl)-; or

wherein A is a three- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic, partially saturated or fully saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur, it not being possible for each ring system to contain $-O-O-$, $-S-S-$ and $-O-S-$ fragments, and it being possible for the three- to ten-membered ring system to be itself mono- or polysubstituted

A1) by substituents independently selected from the group consisting of

halogen, cyano, nitro, hydroxy, mercapto, nitro, azido, formyl, carboxy, $=O$, $=S$, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_8 cycloalkyl, C_1 - C_6 haloalkyl, C_2 - C_6 haloalkenyl, C_2 - C_6 haloalkynyl, C_3 - C_8 halocycloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 haloalkenyloxy, C_3 - C_6 alkynyloxy, C_3 - C_8 cycloalkyloxy, benzyl, benzyloxy, phenyl and phenoxy, where the benzyl, benzyloxy, phenyl and phenoxy, in turn, may be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, amino, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl and C_1 - C_6 alkylsulfonyl; or

A2) by substituents independently selected from the group consisting of $(R_{14})S(=O)(=NR_{13})-$, $(R_{14})(R_{15})S(=O)=N-$, $-Si(R_{51})(R_{52})(R_{53})-$, $-NR_{57}R_{58}$, $-C(=O)NR_{57}R_{58}$, $C(=S)NR_{57}R_{58}$, $HC(=NOR_{59})-$, $(C_1-C_6alkyl)C(=NOR_{59})-$, $(C_1-C_6haloalkyl)C(=NOR_{59})-$, $(C_1-C_6alkyl)C(=NOR_{59})C_1-C_6alkyl$ -, $(C_1-C_6haloalkyl)C(=NOR_{59})C_1-C_6alkyl$ -, $N(C_1-C_6alkyl)aminosulfonyl$ and N,N -di(C_1 - C_6alkyl)aminosulfonyl; or

A3) by substituents independently selected from the group consisting of

formyl, C_2 - C_7 alkylcarbonyl, C_2 - C_7 haloalkylcarbonyl, C_3 - C_7 alkenylcarbonyl, C_3 - C_7 haloalkenylcarbonyl, C_4 - C_9 cycloalkylcarbonyl, C_4 - C_9 halocycloalkylcarbonyl, C_2 - C_7 alkoxycarbonyl, C_2 - C_7 haloalkoxycarbonyl, C_3 - C_7 alkenyloxy carbonyl, C_3 - C_7 alkynyloxy carbonyl, C_4 - C_9 cycloalkoxy carbonyl, C_2 - C_7 alkylthiocarbonyl and benzyloxy carbonyl, and benzyloxy carbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl and C_1 - C_6 alkoxy; or

A4) by substituents independently selected from the group consisting of hydroxyl, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, halogen, C_1 - C_4 haloalkyl, C_2 - C_4 haloalkenyl, cyano, benzyl, phenyl, $=C(R^{36})_2$, $=N-OH$, $=N-O-C_1-C_4alkyl$ -, $=N-O-C_3-C_4alkenyl$ -, $=N-O-C_3-C_4alkynyl$ -, $=N-O-C_1-C_4haloalkyl$ -, $=N-O-C_3-C_4haloalkenyl$ -, $=N-O-benzyl$ and

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=N—O-phenyl, wherein the =N—O-benzyl and =N—O-phenyl are optionally substituted by one or more group selected from the group consisting of halogen, methyl, halomethyl; or

R₅ is —N=C(R₈)(R₉); or

R₅ is a C₈–C₁₁ spirobicyclic system containing 0, 1 or 2 O, S or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁–C₆-alkyl)silyl, C₁–C₆ alkyl, –CH(CH₃)–CH₂–CH₂–CH₃, –CH–CH(CH₃)–CH₂–CH₃, –CH₂–CH₂–CH(CH₃)–CH₃, –CH₂–CH₂–CH(CH₃)₂, –CH(CH₃)–CH(CH₃)₂, C₁–C₆ haloalkyl, C₃–C₆ cycloalkyl, C₃–C₆ halocycloalkyl, C₂–C₆ alkenyl, C₂–C₆ haloalkenyl, C₁–C₆ alkoxy, C₁–C₆ haloalkoxy, C₂–C₇-alkylcarbonyl, C₂–C₇-alkoxycarbonyl, C₄–C₇-alkenyloxycarbonyl, C₄–C₇-alkynyloxycarbonyl, C₁–C₆ alkylthio, C₁–C₆ alkylsulfinyl, C₁–C₆ alkylsulfonyl, =O, –C(=O)NH₂, –C(=O)NH(CH₃), –C(=O)N(CH₃)₂, and –C(=S)NH₂.

Preferably, R₅ represents hydrogen, C₁-C₁₂ alkylsulfonyl, C₁-C₁₂ alkyl, C₃-C₁₂ alkenyl, C₃-C₁₂ alkynyl, or is C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfenyl and C₁-C₆ alkylsulfonyl; or

R_5 is $(R_{51})(R_{52})(R_{53})Si-$, $(R_{61})(R_{62})(R_{63})Si-(C_1-C_{12}alkyl)-$, $(R_{51})(R_{52})(R_{53})Si-(C_3-C_8cycloalkyl)-$, $(R_{54}O)(R_{55}O)(R_{56}O)Si-$, $(R_{54}O)(R_{55}O)(R_{56}O)Si-(C_1-C_{12}alkyl)-$ or $(R_{54}O)(R_{55}O)(R_{56}O)Si-(C_3-C_8cycloalkyl)-$; or

R_5 is C_1-C_6 alkyl-B- C_1-C_2 alkyl-, C_2-C_6 alkenyl-B- C_1-C_{12} alkyl-, C_2-C_6 alkynyl-B- C_1-C_{12} alkyl-, C_3-C_8 cycloalkyl-B- C_1-C_{12} alkyl-, benzyl-B- C_1-C_{12} alkyl-, phenyl-B- C_1-C_{12} alkyl-, C_1-C_6 alkyl-B- C_1-C_{12} alkenyl-, C_2-C_6 alkenyl-B- C_2-C_{12} alkenyl-, C_2-C_6 alkyl-B- C_2-C_{12} alkenyl-, C_3-C_8 cycloalkyl-B- C_2-C_{12} alkenyl-, benzyl-B- C_2-C_{12} alkenyl-, phenyl-B- C_2-C_{12} alkenyl-, C_1-C_6 alkyl-B- C_2-C_{12} alkynyl-, C_2-C_6 alkenyl-B- C_2-C_{12} alkynyl-, C_2-C_6 alkynyl-B- C_2-C_{12} alkynyl-, C_3-C_8 cycloalkyl-B- C_2-C_{12} alkynyl-, benzyl-B- C_2-C_{12} alkynyl-, phenyl-B- C_2-C_{12} alkynyl-, C_1-C_6 alkyl-B- C_3-C_8 cycloalkyl-, C_2-C_6 alkenyl-B- C_3-C_8 cycloalkyl-, C_2-C_6 alkynyl-B- C_3-C_8 cycloalkyl-, C_3-C_8 cycloalkyl-B- C_2-C_8 cycloalkyl-, benzyl-B- C_3-C_{12} cycloalkyl- or phenyl-B- C_3-C_{12} cycloalkyl-, wherein the group B is selected from $-C(=O)-$, $-C(=S)-$, $-C(=NOR_{59})-$, $-C(R_{60})=NO-$, $-ON=C(R_{60})-$, $-O-C(=O)-$, $-C(=O)-O-$, $-O-$, $-S-$, $-S(=O)-$, $-S(=O)_2-$, $-S(=O)(=NR_{13})-$, $-S(=O)(R_{14})=N-$, $-N=S(=O)(R_{14})-$, $-N(R_{62})-C(=O)-$, $-C(=O)-N(R_{62})-$, $-N(R_{62})-SO_2-$ or $-SO_2-N(R_{62})-$; or

R_5 is C_1 - C_6 alkyl-B— C_1 - C_{12} alkyl-, C_2 - C_6 alkenyl-B— C_1 - C_{12} alkyl-, C_2 - C_6 alkynyl-B— C_1 - C_{12} alkyl-, C_3 - C_8 cycloalkyl-B— C_1 - C_{12} alkyl-, benzyl-B— C_1 - C_{12} alkyl-, phenyl-B— C_1 - C_{12} alkyl-, C_1 - C_6 alkyl-B— C_2 - C_{12} alkenyl-, C_2 - C_6 alkenyl-B— C_2 - C_{12} alkenyl-, C_2 - C_6 alkyl-B— C_2 - C_{12} alkenyl-, C_3 - C_8 cycloalkyl-B— C_2 - C_{12} alkenyl-, benzyl-B— C_2 - C_{12} alkenyl-, phenyl-B— C_2 - C_{12} alkenyl-, C_1 - C_6 alkyl-B— C_2 - C_{12} alkynyl-, C_2 - C_6 alkenyl-B— C_2 - C_{12} alkynyl-, C_2 - C_6 alkynyl-B— C_2 - C_{12} alkynyl-, C_3 - C_8 cycloalkyl-B— C_2 - C_{12} alkynyl-, benzyl-B— C_2 - C_{12} alkynyl-, phenyl-B— C_2 - C_{12} alkynyl-, C_1 - C_6 alkyl-B— C_3 - C_8 cycloalkyl-, C_2 - C_6 alkenyl-B— C_3 - C_8 cycloalkyl-, C_2 - C_6 alkynyl-B— C_3 - C_8 cycloalkyl-, C_3 - C_8 cycloalkyl-B—

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C₃-C₈cycloalkyl-, benzyl-B-C₃-C₁₂cycloalkyl-, phenyl-B-C₃-C₁₂cycloalkyl-, all of which, in turn, are mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, formyl, C₂-C₆ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

R₅ is selected from A-, A-(C₁-C₆alkyl)-, A-O-(C₁-C₆alkyl)-, A-(C₃-C₆alkenyl)-, A-O-(C₄-C₆alkenyl)-, A-(C₃-C₆-alkynyl)-, A-O-(C₄-C₆alkynyl)-, A-(C₃-C₈cycloalkyl)- and A-O-(C₃-C₈cycloalkyl)-;

wherein A is a three- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic, partially saturated or fully saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the three- to ten-membered ring system to be itself mono- or polysubstituted

A1) by substituents independently selected from the group consisting of

halogen, cyano, nitro, hydroxy, mercapto, nitro, azido, formyl, carboxy, =O, =S, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₈ halocycloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₈ cycloalkyloxy, C₃-C₈ halocycloalkyloxy, C₃-C₈ cycloalkenyloxy, C₃-C₈ halocycloalkenyloxy, benzyl, benzyloxy, phenyl and phenoxy, where the benzyl, benzyloxy, phenyl and phenoxy, in turn, may be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfenyl and C₁-C₆ alkylsulfonyl; or

A3) by substituents independently selected from the group consisting of

formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₃-C₇ alkenylcarbonyl, C₃-C₇ haloalkenylcarbonyl, C₄-C₉ cycloalkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxy carbonyl, C₄-C₇ alkynyloxy carbonyl, C₄-C₉ cycloalkoxy carbonyl and benzyloxy carbonyl, and benzyloxy carbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

A4) by substituents independently selected from the group consisting of hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl, phenyl, =C(R^{36'})₂, =N-OH, =N-O-C₁-C₄-alkyl, =N-O-C₃-C₄ alkenyl, =N-O-C₃-C₄ alkynyl, =N-O-C₁-C₄ haloalkyl, =N-O-C₃-C₄ haloalkenyl, =N-O-benzyl and =N-O-phenyl, wherein the =N-O-benzyl and =N-O-phenyl are optionally substituted by one or more group selected from the group consisting of halogen, methyl, halomethyl; or

R₅ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O, S or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₅-C₆ alkylcarbonyl,

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C₂-C₇alkoxycarbonyl, C₄-C₇alkenyloxycarbonyl, C₄-C₇alkynyloxycarbonyl, C₁-C₆alkylthio, C₁-C₆alkylsulfanyl, C₁-C₆alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂.

More preferably, R₅ is selected from G¹, G², G³-G⁴, G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹², G¹³, G¹⁴, G¹⁵ and G¹⁶.

More preferably again, R₅ is selected from G¹, G², G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹², G¹⁴, G¹⁵ and G¹⁶.

More favourably again, R₅ is selected from G², G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹⁴, G¹⁶.

Most preferably, R₅ is selected from G², G⁵, G⁸ and G¹⁰-G¹¹.

R₆ is selected from hydrogen and SH.

Most preferably, R₆ is hydrogen.

In one group of compounds, R₆ is SH.

R₇ is hydrogen, halogen or C₁-C₄ alkyl.

Preferably, R₇ is hydrogen or C₁-C₄ alkyl.

Most preferably, R₇ is hydrogen.

R₈ and R₉, independently from each other, are hydrogen, halogen, cyano, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkoxy, formyl, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, carboxy, C₂-C₁₂ alkoxycarbonyl and C₄-C₁₂ alkenyloxycarbonyl, or C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkoxy, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₂-C₁₂ alkoxycarbonyl and C₄-C₁₂ alkenyloxycarbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonyl; or R₈ and R₉ together from a C₂-C₈ alkylene bridge which may optionally be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, C₁-C₆ alkyl and C₁-C₆ haloalkyl; or R₈ and R₉, independently from each other, are the groups A-, A-O— or A-(C₁-C₆alkyl)-.

R₁₀ is H, C₁-C₄ alkyl, C₂-C₄ alkenyl or C₁-C₄ haloalkyl.

R₁₃ is hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, phenyl and benzyl, or is phenyl and benzyl mono- to polysubstituted by halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl or C₁-C₆ alkoxy.

R₁₄ and R₁₅, independently of each other, are C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl or phenyl independently of each other, substituted by substituents selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy.

R₅₁, R₅₂, R₅₃, independently of each other, are halogen, cyano, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₃-C₈ cycloalkyl, C₅-C₈ cycloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, benzyl or phenyl.

R₅₄, R₅₅, R₅₆, independently of each other, are C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₈ cycloalkyl, C₃-C₆ alkynyl, benzyl or phenyl.

R₅₇ and R₅₈, independently of each other, are hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, phenyl or benzyl, where phenyl or benzyl for their part may be mono- to polysubstituted on the phenyl ring by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy, or R₅₇ and R₅₈ together with their interconnecting nitrogen atom are aziridino, azetidino, pyrazolino, pyrazolidino, pyrrolino, pyrrolidino, imidazolino, imidazolidino, triazolino, tetrazolino, piperazino, piperidino, morpholino, thiomorpholino, each of which, in turn, may be mono- or

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polysubstituted by substituents selected from the group consisting of methyl, halogen, cyano.

R₅₉ is hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, benzyl and phenyl, and benzyl and phenyl mono- to polysubstituted by halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl or C₁-C₆ alkoxy.

R₆₀ is hydrogen, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

R₆₂ is hydrogen, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy.

G¹ is a C₈-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl and cyano.

More preferably, G¹ is a C₉-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl and cyano.

More preferably again, G¹ is a C₉-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, fluorine, methoxy and C₁-C₄ fluoroalkyl.

More favourably, G¹ is a saturated C₉-C₁₀ fused bicyclic ring system which is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, fluoro, methoxy and C₁-C₄ fluoroalkyl.

More favourably again, G¹ is a saturated C₁₀ fused bicyclic ring system which is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, fluorine, methoxy and C₁-C₄ fluoroalkyl.

Most preferably, G¹ is a saturated C₁₀ fused bicyclic ring system.

G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ alkylsulfonyl, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

More preferably again, G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio.

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Favourably, G^2 is C_5 - C_6 cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$, C_2 - C_6 haloalkyl and C_1 - C_6 alkoxy.

More favourably, G^2 is a C_5 - C_6 cycloalkenyl group optionally substituted by one or more groups independently selected from fluorine, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl.

More favourably again, G^2 is a C_5 - C_6 cycloalkenyl group optionally substituted by one or more fluorine atoms.

Most preferably, G^2 is a C_5 - C_6 cycloalkenyl group.

In one group of compounds, G^2 is a C_5 - C_6 cycloalkenyl group optionally substituted one or more groups selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$, C_2 - C_6 haloalkyl and C_1 - C_6 alkoxy.

Preferably in this group of compounds, G^2 is a C_5 - C_6 cycloalkenyl group optionally substituted one or more groups selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl.

G^3 is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen.

More preferably again, G^3 is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, C_1 - C_4 fluoroalkyl, C_1 - C_4 alkoxy and halogen.

More favourably again, G^3 is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, CHF_2 , CF_3 , C_1 - C_4 alkoxy and halogen.

Yet more favourably, G^3 is phenyl, which is optionally substituted by one or more groups independently selected from C_1 - C_4 alkyl, CHF_2 , CF_3 , C_1 - C_4 alkoxy and halogen.

Most preferably, G^3 is phenyl.

G^4 is C_3 - C_{12} cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen.

More preferably again, G^4 is C_5 - C_6 cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen.

More favourably again, G^4 is C_5 - C_6 cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy and halogen.

Yet more favourably, G^4 is C_5 - C_6 cycloalkyl which is optionally substituted by one or more groups independently selected from C_1 - C_4 alkyl, C_1 - C_4 alkoxy and halogen.

Yet more favourably still, G^4 is cyclohexyl or cyclopentyl.

Most preferably, G^4 is cyclohexyl.

G^5 is C_3 - C_7 cycloalkyl, which is optionally substituted by one or more groups independently selected from halogen, CN , NO_2 , OH , SH , CHO , COOH , $\text{tri}(C_1\text{-}C_6\text{-alkyl})\text{silyl}$, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$,

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$-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$, C_2 - C_6 haloalkyl, C_3 - C_6 cycloalkyl, C_3 - C_6 halocycloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 -alkenyloxy, C_2 - C_7 alkylcarbonyl, C_2 - C_7 alkoxycarbonyl, C_4 - C_7 alkenyloxycarbonyl, C_4 - C_7 alkynyloxycarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfanyl, C_1 - C_6 alkylsulfonyle, phenoxy, $-\text{C}(=\text{O})\text{NH}_2$, $-\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $-\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$ and $-\text{C}(=\text{S})\text{NH}_2$.

More preferably, G^5 is C_3 - C_7 cycloalkyl, which is optionally substituted by one or more groups independently selected from halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$, C_2 - C_6 haloalkyl, C_1 - C_6 alkoxy, C_3 - C_4 -alkenyloxy, phenoxy and C_1 - C_6 alkylthio.

More preferably again, G^5 is C_3 - C_7 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$, C_2 - C_6 haloalkyl, C_1 - C_6 alkoxy, C_3 - C_4 -alkenyloxy, phenoxy and C_1 - C_6 alkylthio.

More preferably still, G^5 is C_5 - C_7 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$, C_1 - C_4 alkoxy, C_3 - C_4 -alkenyloxy, phenoxy and C_2 - C_6 haloalkyl.

More favourably again, G^5 is C_5 - C_6 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$ and C_2 - C_6 haloalkyl.

Yet more favourably, G^5 is C_5 - C_6 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$ and CHF_2 and CF_3 .

Most preferably, G^5 is C_6 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$ and $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$.

In another group of compounds, G^5 is a C_5 - C_6 cycloalkyl, which is optionally substituted by one or more halogen.

More preferably in this group, G^5 is a C_5 - C_6 cycloalkyl, which is optionally substituted by one or more fluorine.

Even more preferably in this group, G^5 is an unsubstituted C_5 - C_6 cycloalkyl.

In another group of compounds, G^5 is a C_5 - C_6 cycloalkyl, which is optionally substituted by one or more groups selected from the group consisting of C_1 - C_4 alkoxy, C_3 - C_4 -alkenyloxy or phenoxy.

Preferably in this group of compounds, G^5 is a C_5 - C_6 cycloalkyl, which is optionally substituted by one or more groups selected from the group consisting of methoxy, ethoxy, C_3 - C_4 alkenyloxy and phenoxy.

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G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl.

More preferably again, G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio and C₁-C₆ alkylsulfonyl.

Yet more preferably, G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy and C₁-C₆ alkylthio.

Favourably, G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy.

More favourably again, G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₁-C₄ alkoxy.

Yet more favourably, G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more halogen, CHF₂, CF₃ and C₁-C₄ alkyl.

Most preferably, G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more methyl, bromine, iodine or chlorine.

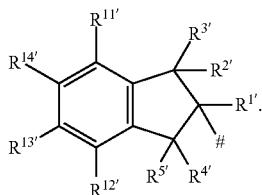
In one group of compounds, G⁶ is phenyl substituted at the para-position by fluorine and further substituted as in the above paragraphs.

In one group of compounds, G⁶ is phenyl substituted at the ortho-position by fluorine and further substituted as in the above paragraphs.

In one group of compounds, G⁶ is phenyl substituted at the meta-position by fluorine and further substituted as in the above paragraphs.

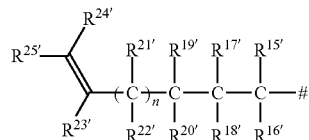
G⁷ is methylene.

G⁸ is



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G⁹ is



G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, phenyl, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylsulfonyl, phenyl, 2-phenyl-ethynyl and 2-phenyl-ethyl.

Preferably, G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, phenyl, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl.

More preferably, G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, OH, SH, CHO, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ cycloalkoxy, phenyl, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonyl.

More preferably again, G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, OH, SH, CHO, methyl, ethyl, n-propyl, iso-propyl, phenyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, CF₂—CF₃, cyclopropyl, CH=CH₂, C(CH₃)=CH₂, CH=CH(CH₃), C(CH₃)=CH(CH₃), CH=C(CH₃)₂, C(CH₃)=C(CH₃)₂, CH=CF₂, CH=CCl₂, C=CH, methoxy, ethoxy, iso-propyloxy, OCHF₂, OCH₂—C=CH, OCH(CH₃)—C=CH, SCH₃, SCH₂CH₃, S(=O)CH₃, S(=O)CH₂CH₃, S(=O)₂CH₃ and S(=O)₂CH₂CH₃.

More favourably again, G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, OH, methyl, ethyl, n-propyl, iso-propyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, CF₂—CF₃, CH=CH₂, C(CH₃)=CH₂, CH=CH(CH₃), C(CH₃)=CH(CH₃), CH=C(CH₃)₂, C(CH₃)=C(CH₃)₂, CH=CF₂, CH=CCl₂, C=CH, methoxy, phenyl, ethoxy, iso-propyloxy and OCHF₂.

Yet more favourably, G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, methyl, ethyl, n-propyl, iso-propyl, ethyl, methoxy, ethoxy, iso-propyloxy, phenyl, CHF₂, CF₃, CHF—CH₃ and OCHF₂.

Most preferably, G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from

Yet more favourably, G¹⁷ is a five- to six-membered mono-
cyclic heteroaromatic ring system which can contain 1 or 2
members selected from the group consisting of N, N(R⁶⁹), O
and S, it not being possible for each ring system to contain
—O—O—, —S—S— and —O—S— fragments, and it
being possible for the five- to six-membered ring system to be
itself mono- or polysubstituted by groups selected from the
group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄
haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or benzyl.

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wherein the phenyl or benzyl are optionally substituted by halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl.

Most preferably, G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 or 2 members selected from the group consisting of N, O and S, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or fluorophenyl. In one group of compounds, G¹⁷ is selected from pyridine, pyrimidine, furan, pyrrole, thiazole, oxazole, pyrazole, imidazole, oxadiazole, thiadiazole or tetrazole each of which may be substituted by one or more groups selected from the group consisting of halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl.

More favourably again in this group, G¹⁷ is selected from pyridine, pyrimidine, furan, pyrrole, thiazole, oxazole, pyrazole, imidazole, oxadiazole, thiadiazole or tetrazole each of which may be substituted by one or more groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or benzyl, wherein the phenyl or benzyl are optionally substituted by halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl.

Yet more favourably in this group, G¹⁷ is selected from pyridine, pyrimidine, furan, pyrrole, thiazole, oxazole, pyrazole, or imidazole each of which may be substituted by one or more groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or benzyl, wherein the phenyl or benzyl are optionally substituted by halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl.

Most preferably in this group, G¹⁷ is selected from pyridine, furan, pyrrole, thiazole or oxazole or imidazole each of which may be substituted by one or more groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or fluorophenyl.

In another group of compounds, G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 member selected from the group consisting of N and O (for example, pyridine, furan or pyrrole), it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy or C₁-C₄ haloalkoxy.

Preferably in this group, G¹⁷ is pyridine, furan or pyrrole each of which may be mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy or C₁-C₄ haloalkoxy.

In another group of compounds, G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 2 members selected from the group consisting of N, O and S, (for example oxazole or thiazole) it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halo-

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gen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or fluorophenyl.

Preferably in this group, G¹⁷ is oxazole or thiazole each of which may be mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or fluorophenyl.

R^{1'} is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

R^{2'}, R^{3'}, R^{4'} and R^{5'} are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio.

More preferably again, R^{1'} is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl and C₁-C₄ fluoroalkyl;

R^{2'}, R^{3'}, R^{4'} and R^{5'} are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio.

Yet more preferably, R^{1'}, R^{2'}, R^{3'}, R^{4'} and R^{5'} are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, ethyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, methoxy, ethoxy and S—CH₂CH₃.

More favourably again, R^{1'} is selected from the group consisting of hydrogen, fluorine, methyl, CH₂F and CF₃;

R^{2'}, R^{3'}, R^{4'} and R^{5'} are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, CH₂F, CF₃ and methoxy.

Most preferably, R^{1'}, R^{2'}, R^{3'}, R^{4'} and R^{5'} are each hydrogen.

R^{11'}, R^{12'}, R^{13'} and R^{14'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, phenyl, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, benzyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl.

More preferably again, R^{11'}, R^{12'}, R^{13'} and R^{14'} are selected, independently of each other, from the group consisting of hydrogen, cyano, halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio.

More favourably again, R^{11'}, R^{12'}, R^{13'} and R^{14'} are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, CHF₂, CF₃ and C₁-C₄ alkoxy.

Most preferably, R^{11'}, R^{12'}, R^{13'} and R^{14'} are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ alkoxy.

R^{15'} and R^{16'} are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

R^{23'}, R^{24'} and R^{25'} are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio.

More preferably again, R^{15'}, R^{16'}, R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} are independently selected from the group consisting

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of hydrogen, halogen, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$, CF_2-CH_3 and CF_2CF_3 ;

$\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are independently selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halo-

cycloalkyl and C_1 - C_4 alkylthio.
Favourably, $\text{R}^{15'}$, $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$ and $\text{R}^{22'}$ are independently selected from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$, CF_2-CH_3 , $\text{CH}_2-\text{CH}_2\text{F}$, CH_2-CHF_2 and CH_2-CF_3 ;

$\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are independently selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halo-

cycloalkyl and C_1 - C_4 alkylthio.
More favourably, $\text{R}^{15'}$, $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$ and $\text{R}^{22'}$ are each independently selected from hydrogen, fluorine, methyl, ethyl, CH_2F , CHF_2 and CF_3 and isopropyl;

$\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are independently selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halo-

cycloalkyl and C_1 - C_4 alkylthio.
More favourably again, $\text{R}^{15'}$, $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$ and $\text{R}^{22'}$ are each independently selected from hydrogen, fluorine, methyl, ethyl, CH_2F , CHF_2 , CF_3 and isopropyl;

$\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are independently selected from the group consisting of hydrogen, methyl, fluorine, chlorine, bromine, ethyl, CH_2F , CHF_2 and CF_3 and isopropyl.

Yet more favourably, $\text{R}^{15'}$, $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$ and $\text{R}^{22'}$ are each independently selected from hydrogen, fluorine, methyl, ethyl, CH_2F , CHF_2 , CF_3 and isopropyl;

$\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are each independently selected from hydrogen, fluorine, chlorine, bromine, methyl, ethyl and isopropyl.

Most preferably, $\text{R}^{15'}$, $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$, $\text{R}^{22'}$, $\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are each independently selected from hydrogen, methyl, ethyl and isopropyl.

In one group of compounds, $\text{R}^{15'}$ and $\text{R}^{16'}$ are each independently selected from the group consisting of hydrogen, methyl, F and CF_3 .

In this group, $\text{R}^{15'}$, $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$ and $\text{R}^{22'}$ are most preferably each hydrogen.

In another preferred group of compounds, $\text{R}^{15'}$ is as described above and $\text{R}^{16'}$, $\text{R}^{17'}$, $\text{R}^{18'}$, $\text{R}^{19'}$, $\text{R}^{20'}$, $\text{R}^{21'}$ and $\text{R}^{22'}$ are each hydrogen.

In another group of compounds, $\text{R}^{23'}$, $\text{R}^{24'}$ and $\text{R}^{25'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$, CF_2-CH_3 , $\text{CH}_2-\text{CH}_2\text{F}$, CH_2-CHF_2 and CH_2-CF_3 .

$\text{R}^{26'}$ is $\text{C}(\text{R}^{36'})_2$, $\text{N}-\text{O}-\text{C}_1-\text{C}_4$ -alkyl, $\text{N}-\text{O}-\text{C}_2-\text{C}_4$ -alkenyl, $\text{N}-\text{O}-\text{C}_2-\text{C}_4$ alkynyl, $\text{N}-\text{O}-\text{C}_1-\text{C}_4$ haloalkyl, $\text{N}-\text{O}-\text{C}_2-\text{C}_4$ haloalkenyl, $\text{N}-\text{O}$ -benzyl, $\text{N}-\text{O}$ -phenyl, $\text{N}-\text{O}$ -halophenyl, O wherein the $\text{N}-\text{O}$ -benzyl and $\text{N}-\text{O}$ -phenyl may be substituted by one or more groups independently selected from the group consisting of halogen, methyl and halomethyl.

Most preferably, $\text{R}^{26'}$ is $\text{N}-\text{OH}$, $\text{N}-\text{O}-\text{C}_1-\text{C}_4$ alkyl, $\text{N}-\text{O}-\text{C}_2-\text{C}_4$ alkenyl, $\text{N}-\text{O}-\text{C}_2-\text{C}_4$ alkynyl, $\text{N}-\text{O}-\text{C}_1-\text{C}_4$ haloalkyl, $\text{N}-\text{O}-\text{C}_2-\text{C}_4$ haloalkenyl, $\text{N}-\text{O}$ -benzyl, $\text{N}-\text{O}$ -phenyl, $\text{N}-\text{O}$ -halophenyl, O or $\text{C}(\text{R}^{36'})$.

$\text{R}^{27'}$, $\text{R}^{28'}$, $\text{R}^{29'}$, $\text{R}^{30'}$, $\text{R}^{31'}$, $\text{R}^{32'}$, $\text{R}^{33'}$, $\text{R}^{34'}$ and $\text{R}^{35'}$ are each independently selected from the group consisting of hydrogen, hydroxyl, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, halogen, C_1 - C_4 haloalkyl, C_2 - C_4 haloalkenyl, cyano, benzyl and phenyl;

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or $\text{R}^{28'}$ and $\text{R}^{29'}$ together with the two carbon atoms to which they are attached form a double bond.

More preferably again, $\text{R}^{27'}$, $\text{R}^{28'}$, $\text{R}^{29'}$, $\text{R}^{30'}$, $\text{R}^{31'}$, $\text{R}^{32'}$, $\text{R}^{33'}$, $\text{R}^{34'}$ and $\text{R}^{35'}$ are each independently selected from the group consisting of hydrogen, hydroxyl, C_1 - C_4 alkyl, C_1 - C_4 alkoxy and halogen;

or $\text{R}^{28'}$ and $\text{R}^{29'}$ together with the two carbon atoms to which they are attached form a double bond.

More favourably again, $\text{R}^{27'}$, $\text{R}^{28'}$, $\text{R}^{29'}$, $\text{R}^{30'}$, $\text{R}^{31'}$, $\text{R}^{32'}$, $\text{R}^{33'}$, $\text{R}^{34'}$ and $\text{R}^{35'}$ are each independently selected from the group consisting of hydrogen, C_1 - C_4 alkyl and halogen;

or $\text{R}^{28'}$ and $\text{R}^{29'}$ together with the two carbon atoms to which they are attached form a double bond.

Yet more favourably $\text{R}^{27'}$, $\text{R}^{28'}$, $\text{R}^{29'}$, $\text{R}^{30'}$, $\text{R}^{31'}$, $\text{R}^{32'}$, $\text{R}^{33'}$, $\text{R}^{34'}$ and $\text{R}^{35'}$ are each hydrogen or methyl;

or $\text{R}^{28'}$ and $\text{R}^{29'}$ together with the two carbon atoms to which they are attached form a double bond.

Most preferably $\text{R}^{27'}$ is hydrogen or methyl;

$\text{R}^{28'}$, $\text{R}^{29'}$, $\text{R}^{30'}$, $\text{R}^{31'}$, $\text{R}^{32'}$, $\text{R}^{33'}$, $\text{R}^{34'}$ and $\text{R}^{35'}$ are each hydrogen; or $\text{R}^{28'}$ and $\text{R}^{29'}$ together with the two carbon atoms to which they are attached form a double bond.

Each $\text{R}^{36'}$ is independently selected from hydrogen, halogen and C_1 - C_4 alkyl.

$\text{R}^{37'}$ and $\text{R}^{38'}$ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio.

More preferably again, $\text{R}^{37'}$, $\text{R}^{38'}$, $\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are selected independently of each other from a group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl.

Favourably, $\text{R}^{37'}$, $\text{R}^{38'}$, $\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are selected independently of each other from a group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$, CF_2-CH_3 , $\text{CH}_2-\text{CH}_2\text{F}$, CH_2-CHF_2 , and CH_2-CF_3 .

More favourably again, $\text{R}^{37'}$, $\text{R}^{38'}$, $\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are independently selected from the group consisting of hydrogen, fluorine, methyl and trifluoromethyl.

Yet more favourably, $\text{R}^{37'}$, $\text{R}^{38'}$, $\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are hydrogen or methyl.

Most preferably, $\text{R}^{37'}$, $\text{R}^{38'}$, $\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are hydrogen.

In one group of compounds, $\text{R}^{38'}$, $\text{R}^{39'}$, $\text{R}^{40'}$, $\text{R}^{41'}$, $\text{R}^{42'}$, $\text{R}^{43'}$ and $\text{R}^{44'}$ are each hydrogen, and $\text{R}^{37'}$ is as defined above.

$\text{R}^{45'}$, $\text{R}^{46'}$, $\text{R}^{47'}$, $\text{R}^{48'}$ and $\text{R}^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_3 - C_6 cycloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 haloalkenyloxy, C_3 - C_6 alkynyloxy, C_3 - C_6 cycloalkoxy, C_3 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C_1 - C_6 haloalkylthio, C_1 - C_6 alkylsulfanyl, C_1 - C_6 haloalkylsulfanyl, C_1 - C_6 alkylsulfonyl and C_1 - C_6 haloalkylsulfonyl.

More preferably again, $\text{R}^{45'}$, $\text{R}^{46'}$, $\text{R}^{47'}$, $\text{R}^{48'}$ and $\text{R}^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, cyclopropyl, $\text{C}=\text{CH}$, $\text{CH}=\text{CH}_2$, $\text{C}(\text{CH}_3)=\text{CH}_2$, CF_3 , CHF_2 , CH_2F , $-\text{CHF}-\text{CH}_3$, $-\text{CF}_2-\text{CH}_3$, methoxy,

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ethoxy, difluoromethoxy, trifluoromethoxy, methylthio, methylsulfinyl and methylsulfonyl.

Most preferably, $R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, methyl, CF_3 , CHF_2 , CH_2F , methoxy, difluoromethoxy and trifluoromethoxy.

$R^{50'}$ is selected from the group consisting of hydrogen, fluorine, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl;

$R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkoxy and C_1 - C_4 alkylthio.

More preferably again, $R^{50'}$ is selected from the group consisting of hydrogen, fluorine, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl;

$R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkoxy and C_1 - C_4 haloalkoxy.

Favourably, $R^{50'}$, $R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, ethyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$ and CF_2-CH_3 .

More favourably again, $R^{50'}$, $R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, CH_2F and CF_3 .

Most preferably, $R^{50'}$, $R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are each hydrogen.

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $C(=O)NH_2$, $C(=O)NH(CH_3)$, $C(=O)N(CH_3)_2$, $C(=S)NH_2$, $C(=S)NH(CH_3)$, $C(=S)N(CH_3)_2$, SO_2NH_2 , $SO_2NH(CH_3)$, $SO_2N(CH_3)_2$, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_3 - C_6 cycloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_2 - C_6 alkoxy, C_2 - C_6 haloalkoxy, phenyl, C_3 - C_6 alkenyloxy, C_3 - C_6 haloalkenyloxy, C_3 - C_6 alkynyloxy, C_3 - C_6 cycloalkoxy, C_3 - C_6 halocycloalkoxy, benzyloxy, C_1 - C_6 alkylthio, C_1 - C_6 haloalkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 alkylsulfonyl and C_1 - C_6 haloalkylsulfonyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

More preferably again, $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, cyano, halogen, C_1 - C_6 alkyl and C_1 - C_6 haloalkyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

More favourably again, $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, CHF_2 and CF_3 ;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

Most preferably, $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen and halogen;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

In another group of compounds, $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, phenyl and halophenyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

In another group of compounds, $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, methy, ethyl and hydroxy- C_2 - C_4 -alkyl;

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provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

Preferably in this group, $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen and hydroxyethyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen.

$R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio.

More preferably again, $R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 haloalkoxy.

More favourably again, $R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, CHF_2 and CF_3 ;

$R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each of them from the group consisting of hydrogen, fluorine, methyl, ethyl, methoxy, difluoromethoxy, trifluoromethoxy, CHF_2 and CF_3 .

Yet more favourably, $R^{61'}$, $R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are hydrogen, CHF_2 , CF_3 or methyl.

Yet more favourably still, $R^{61'}$, $R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are hydrogen or methyl.

Most preferably, $R^{61'}$, $R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are hydrogen.

$R^{69'}$ is selected from hydrogen, C_1 - C_4 alkyl, C_3 - C_4 alkenyl and C_1 - C_4 alkylcarboxy.

More preferably again, $R^{69'}$ is selected from hydrogen, C_1 - C_4 alkyl and C_1 - C_4 alkylcarboxy.

More favourably again, $R^{69'}$ is selected from hydrogen and C_1 - C_4 alkyl.

Most preferably, $R^{69'}$ is hydrogen.
n is 0 or 1.

In one preferred group of compounds, n is 0.

In another preferred group of compounds, n is 1.

p and q are independently selected from 0 and 1.

In one group of compounds, p and q are 0.

In another group of compounds, p and q are 1.

In another group of compounds, p is 1 and q is 0.

r, s and t are independently selected from 0 and 1.

More preferably again, r and s are 0 and t is 1 or 0.

Most preferably, r, s and t are each 0.

In a group of compounds of formula I, R_1 and R_2 are each independently selected from hydrogen, C_1 - C_4 alkyl, C_3 - C_4 alkenyl and C_3 - C_4 alkynyl;

or R_1 and R_2 together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine;

R_3 represents hydrogen, halogen, cyano, mercapto, hydroxy, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkenyl, C_2 - C_4 haloalkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_3 - C_6 cycloalkyl, amino, C_1 - C_2 alkylamino, di(C_1 - C_6 alkyl) amino, pyrrolidino, imidazolino, triazolino, tetrazolino, formyl, C_2 - C_5 alkylcarbonyl, C_2 - C_5 haloalkylcarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylthio, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 haloalkylsulfonyl or C_1 - C_6 hydroxyalkyl;

R_4 represents hydrogen, halogen, cyano, amino, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_3 - C_6 cycloalkyl, C_2 - C_4 alkenyl,

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C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, methylamino and dimethylamino;

R₅ represents hydrogen, C₁-C₁₂-alkylsulfonyl, C₁-C₁₂ alkyl, C₃-C₁₂ alkenyl, C₃-C₁₂ alkynyl, or is C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

R₅ is (R₅₁)(R₅₂)(R₅₃)Si—, (R₅₁)(R₅₂)(R₅₃)Si—(C₁-C₁₂alkyl)—, (R₅₁)(R₅₂)(R₅₃)Si—(C₃-C₈cycloalkyl)—, (R₅₄O)(R₅₅O)(R₅₆O)Si—, (R₅₄O)(R₅₅O)(R₅₆O)Si—(C₁-C₁₂alkyl)— or (R₅₄O)(R₅₅O)(R₅₆O)Si—(C₃-C₈cycloalkyl)—; or

R₅ is C₁-C₆alkyl-B—C₁-C₁₂alkyl-, C₂-C₆alkenyl-B—C₁-C₁₂alkyl-, C₂-C₆alkynyl-B—C₁-C₁₂alkyl-, C₃-C₈cycloalkyl-B—C₁-C₁₂alkyl-, benzyl-B—C₁-C₁₂alkyl-, phenyl-B—C₁-C₁₂alkyl-, C₁-C₆alkyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phenyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₈cycloalkyl- or phenyl-B—C₃-C₈cycloalkyl-, wherein the group B is selected from —C(=O)—, —C(=S)—, —C(=NOR₅₉)—, —C(R₆₀)=NO—, —ON=C(R₆₀)—, —O—C(=O)—, —C(=O)—O—, —O—, —S—, —S(=O)—, —S(=O)₂—, —S(=O)₃—, —NR₁₃—, —S(=O)(R₁₄)—N—, —N=S(=O)(R₁₄)—, —N(R₆₂)—C(=O)—, —C(=O)—N(R₆₂)—, —N(R₆₂)—SO₂— or —SO₂—N(R₆₂)—; or

R₅ is C₁-C₆alkyl-B—C₁-C₁₂alkyl-, C₂-C₆alkenyl-B—C₁-C₁₂alkyl-, C₂-C₆alkynyl-B—C₁-C₁₂alkyl-, C₃-C₈cycloalkyl-B—C₁-C₁₂alkyl-, benzyl-B—C₁-C₁₂alkyl-, phenyl-B—C₁-C₁₂alkyl-, C₁-C₆alkyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phenyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₈cycloalkyl-, phenyl-B—C₃-C₈cycloalkyl-, all of which, in turn, are mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, formyl, C₂-C₆ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

R₅ is selected from A-, A-(C₁-C₆alkyl)-, A-O-(C₁-C₆alkyl)-, A-(C₃-C₆alkenyl)-, A-O-(C₄-C₆alkenyl)-, A-(C₃-C₆alkynyl)-, A-O-(C₄-C₆alkynyl)-, A-(C₃-C₈cycloalkyl)- and A-O-(C₃-C₈cycloalkyl)-;

wherein A is a three- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic, partially saturated or fully saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur, it not being possible for each ring system to contain

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—O—O—, —S—S— and —O—S— fragments, and it being possible for the three- to ten-membered ring system to be itself mono- or polysubstituted

A1) by substituents independently selected from the group consisting of

halogen, cyano, nitro, hydroxy, mercapto, nitro, azido, formyl, carboxy, =O, =S, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₈ halocycloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₈ cycloalkyloxy, C₃-C₈ halocycloalkyloxy, C₃-C₈ cycloalkenyloxy, C₃-C₈ halocycloalkenyloxy, benzyl, benzyloxy, phenyl and phenoxy, where the benzyl, benzyloxy, phenyl and phenoxy, in turn, may be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

A3) by substituents independently selected from the group consisting of

formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₃-C₇ alkenylcarbonyl, C₃-C₇ haloalkenylcarbonyl, C₄-C₉ cycloalkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxy carbonyl, C₄-C₇ alkynyloxy carbonyl, C₄-C₈ cycloalkoxy carbonyl and benzyloxy carbonyl, and benzyloxy carbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

A4) by substituents independently selected from the group consisting of hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl, phenyl, =C(R³⁶)₂, =N—OH, =N—O—C₁-C₄-alkyl, =N—O—C₃-C₄ alkenyl, =N—O—C₃-C₄ alkynyl, =N—O—C₁-C₄ haloalkyl, =N—O—C₃-C₄ haloalkenyl, =N—O—benzyl and =N—O—phenyl, wherein the =N—O—benzyl and =N—O—phenyl are optionally substituted by one or more group selected from the group consisting of halogen, methyl, halomethyl; or

R₅ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O, S or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxy carbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

R₆ is hydrogen;

R₇ is hydrogen or C₁-C₄ alkyl.

In another group of compounds of formula I, R₁ and R₂ are each independently selected from hydrogen or C₁-C₄ alkyl; or R₁ and R₂ together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine;

R₃ represents hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, amino, C₁-C₂ alkylamino, di(C₁-C₆alkyl) amino, pyrrolidino, imidazolino, triazolino, formyl, phenyl, C₂-C₄ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl or C₁-C₆ hydroxyalkyl;

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R₄ is selected from fluorine, chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ alkenyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, and C₃-C₆ cycloalkyl;

R₅ is selected from G¹, G², G³-G⁴, G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹², G¹³, G¹⁴, G¹⁵ and G¹⁶;

R₆ is hydrogen;

R₇ is selected from hydrogen or C₁-C₄ alkyl;

G¹ is a C₈-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl and cyano;

G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ alkylsulfonyl, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

G³ is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

G⁴ is C₃-C₁₂ cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

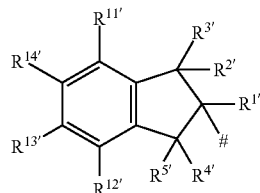
G⁵ is C₃-C₇ cycloalkyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆-alkenyloxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ alkylsulfonyl, phenoxy, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

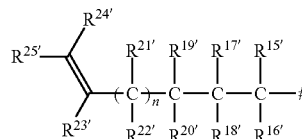
G⁷ is methylene;

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G⁸ is



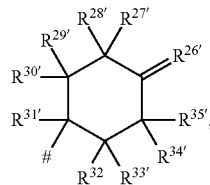
G⁹ is



G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ haloalkenyloxy, C₃-C₆ cycloalkoxy, phenyl, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ haloalkylsulfonyl, phenyl, 2-phenyl-ethynyl and 2-phenyl-ethyl;

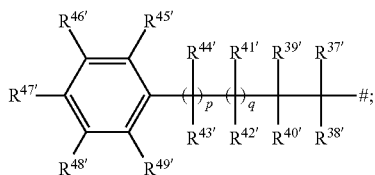
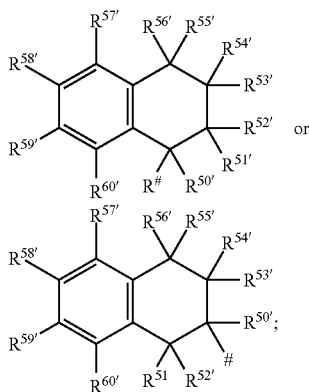
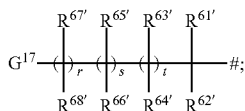
G¹¹ is methylene substituted by at least one group independently selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, CN, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

G¹² is



G¹³ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆ alkyl)silyl, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ alkylsulfonyl, —O—, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

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G¹⁴ isG¹⁵ isG¹⁶ is

G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, N(R^{69'}), O and S (for example, pyridine, pyrimidine, furan, pyrrole, thiazole, oxazole, pyrazole, imidazole, oxadiazole, thiadiazole or tetrazole), it not being possible for each ring system to contain —O—O—, —S—S— and —O—S—fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{1'} is selected from the group consisting of hydrogen, fluorine, C₁-C₄-alkyl, C₁-C₄-haloalkyl;

R^{2'}, R^{3'}, R^{4'} and R^{5'} are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

R^{11'}, R^{12'}, R^{13'} and R^{14'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂,

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SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, phenyl, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, benzyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{15'} and R^{16'} are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

R^{23'}, R^{24'} and R^{25'} are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

R^{26'} is C(R^{36'})₂, N—OH, N—O—C₁-C₄-alkyl, N—O—C₂-C₄-alkenyl, N—O—C₂-C₄ alkynyl, N—O—C₁-C₄ haloalkyl, N—O—C₂-C₄ haloalkenyl, N—O-benzyl, N—O-phenyl, N—O-halophenyl, O wherein the N—O-benzyl and N—O-phenyl may be substituted by one or more groups independently selected from the group consisting of halogen, methyl and halomethyl;

R^{27'}, R^{28'}, R^{29'}, R^{30'}, R^{31'}, R^{32'}, R^{33'}, R^{34'} and R^{35'} are each independently selected from the group consisting of hydrogen, hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl and phenyl;

or R^{28'} and R^{29'} together with the two carbon atoms to which they are attached form a double bond;

each R^{36'} is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{50'} is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

R^{51'}, R^{52'}, R^{53'}, R^{54'}, R^{55'} and R^{56'} are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkoxy and C₁-C₄ alkylthio;

R^{57'}, R^{58'}, R^{59'} and R^{60'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₂-C₆ alkoxy, C₂-C₆

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haloalkoxy, phenyl, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, benzyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonfyl and C₁-C₆ haloalkylsulfonfyl;

provided that at least one of R⁵⁷, R⁵⁸, R⁵⁹ and R⁶⁰ is not hydrogen;

R⁶¹ and R⁶² are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷ and R⁶⁸ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

R⁶⁹ is selected from hydrogen, C₁-C₄ alkyl and C₁-C₄ alkylcarboxy;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r, s and t are independently selected from 0 and 1.

In another group of compounds of formula I, R₁ and R₂ are each C₁-C₄ alkyl;

R₃ represents hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfanyl or C₁-C₄ alkylsulfonfyl;

R₄ is selected from methyl, ethyl, methoxy, fluorine and chlorine;

R₆ is hydrogen;

R₇ is hydrogen or C₁-C₄ alkyl.

In another group of compounds, R₁ and R₂ are each independently selected from methyl, ethyl and isopropyl;

R₃ represents hydrogen, halogen, C₁-C₄ alkyl, C₁-C₄ haloalkyl, cyclopropyl, ethynyl or C₁-C₄ alkoxy;

R₄ is selected from methyl, methoxy, fluorine and chlorine;

R₆ is hydrogen;

R₇ is hydrogen.

In another group of compounds, R₁ is methyl;

R₂ is ethyl;

R₃ is selected from hydrogen, bromine, iodine, methyl, CHF₂, cyclopropyl, ethynyl and methoxy;

R₄ is methyl;

R₆ is hydrogen;

R₇ is hydrogen.

In another group of compounds, G¹ is a C₉-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, fluorine, methoxy and C₁-C₄ fluoroalkyl;

G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio;

G³ is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ fluoroalkyl, C₁-C₄ alkoxy and halogen;

G⁴ is C₃-C₆ cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

G⁵ is C₃-C₇ cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—

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CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₁-C₆ alkoxy, C₃-C₄-alkenyloxy, phenoxy and C₁-C₆ alkylthio;

G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonfyl;

G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, OH, SH, CHO, methyl, ethyl, n-propyl, iso-propyl, phenyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, CF₂—CF₃, cyclopropyl, CH=CH₂, C(CH₃)=CH₂, CH=CH(CH₃), C(CH₃)=CH(CH₃), CH=C(CH₃)₂, C(CH₃)=C(CH₃)₂, CH=CF₂, CH=CCl₂, C=CH, methoxy, ethoxy, iso-propyloxy, OCHF₂, OCH₂—C=CH, OCH(CH₃)—C=CH, SCH₃, SCH₂CH₃, S(=O)CH₃, S(=O)CH₂CH₃, S(=O)₂CH₃ and S(=O)₂CH₂CH₃;

G¹¹ is methylene substituted by at least one group independently selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, CN, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

G¹³ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ alkylthio and =O;

G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, N(R⁶⁹), O and S (for example, pyridine, pyrimidine, furan, pyrrole, thiazole, oxazole, pyrazole, imidazole, oxadiazole, thiadiazole or tetrazole), it not being possible for each ring system to contain —O—O—, —S—S— and —O—S—fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonfyl and C₁-C₆ haloalkylsulfonfyl;

R¹⁷ is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl and C₁-C₄ fluoroalkyl;

R²⁷, R³⁷, R⁴⁷ and R⁵⁷ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

R¹¹⁷, R¹²⁷, R¹³⁷ and R¹⁴⁷ are selected, independently of each other, from the group consisting of hydrogen, cyano, halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio;

R¹⁵⁷, R¹⁶⁷, R¹⁷⁷, R¹⁸⁷, R¹⁹⁷, R²⁰⁷, R²¹⁷ and R²²⁷ are independently selected from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃ and CF₂CF₃;

R²³⁷, R²⁴⁷ and R²⁵⁷ are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ haloalkenyl and C₁-C₄ alkylthio;

$R^{26'}$ is N—OH, N—O—C₁-C₄ alkyl, N—O—C₂-C₄ alkenyl, N—O—C₂-C₄ alkynyl, N—O—C₁-C₄ haloalkyl, N—O—C₂-C₄ haloalkenyl, N—O-benzyl, N—O-phenyl, N—O-halophenyl, O, or C(R^{36'})₂;

$R^{27'}$, $R^{28'}$, $R^{29'}$, $R^{30'}$, $R^{31'}$, $R^{32'}$, $R^{33'}$, $R^{34'}$ and $R^{35'}$ are each independently selected from the group consisting of hydrogen, hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy and halogen;

or $R^{28'}$ and $R^{29'}$ together with the two carbon atoms to which they are attached form a double bond;

each $R^{36'}$ is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

$R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from a group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, difluoromethoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

$R^{50'}$ is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

$R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkoxy and C₁-C₄ haloalkoxy;

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, cyano, halogen, C₁-C₆ alkyl and C₁-C₆ haloalkyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

$R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

$R^{69'}$ is selected from hydrogen, C₁-C₄ alkyl and C₁-C₄ alkylcarboxy;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r and s are 0 and t is 1 or 0.

In another group of compounds, G¹ is a saturated C₁₀ fused bicyclic ring system which is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, fluorine, methoxy and C₁-C₄ fluoroalkyl;

G² is a C₅-C₆ cycloalkenyl group optionally substituted by one or more fluorine atoms;

G³ is phenyl, which is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, CHF₂, CF₃, C₁-C₄ alkoxy and halogen;

G⁴ is C₅-C₆ cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy and halogen;

G⁵ is C₅-C₆ cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂ and C₂-C₆ haloalkyl;

G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more

groups independently selected from halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₁-C₄ alkoxy.

G⁷ is methylene;

G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from hydrogen, halogen, CN, OH, methyl, ethyl, n-propyl, iso-propyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, CF₂—CF₃, CH=CH₂, C(CH₃)=CH₂, CH=CH(CH₃), C(CH₃)=CH(CH₃), CH=C(CH₃)₂, C(CH₃)=C(CH₃)₂, CH=CF₂, CH=CCl₂, C≡CH, methoxy, ethoxy, iso-propyloxy, phenyl and OCHF₂;

G¹¹ is methylene substituted by at least one group independently selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₁-C₄ alkoxy;

G¹³ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ alkylthio and =O;

G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, N(R⁶⁹), O and S it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, phenyl or benzyl, wherein the phenyl or benzyl are optionally substituted by halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

R¹ is selected from the group consisting of hydrogen, fluorine, methyl, CH₂F and CF₃;

R², R³, R⁴ and R⁵ are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, CH₂F, CF₃ and methoxy;

R¹¹, R¹², R¹³ and R¹⁴ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, CHF₂, CF₃ and C₁-C₄ alkoxy;

R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are each independently selected from hydrogen, fluorine, methyl, ethyl, CH₂F, CHF₂, CF₃ and isopropyl;

R²³, R²⁴ and R²⁵ are independently selected from the group consisting of hydrogen, methyl, fluorine, chlorine, bromine, ethyl, CH₂F, CHF₂ and CF₃ and isopropyl;

R²⁶ is N—OH, N—O—C₁-C₄ alkyl, N—O—C₂-C₄ alkenyl, N—O—C₂-C₄ alkynyl, N—O—C₁-C₄ haloalkyl, N—O—C₂-C₄ haloalkenyl, N—O-benzyl, N—O-phenyl, N—O-halophenyl, O, C₂-C₄ alkenyloxy or C(R³⁶)₂;

R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴ and R³⁵ are each independently selected from the group consisting of hydrogen, C₁-C₄ alkyl and halogen;

or R²⁸ and R²⁹ together with the two carbon atoms to which they are attached form a double bond;

each R³⁶ is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³ and R⁴⁴ are independently selected from the group consisting of hydrogen, fluorine, methyl and trifluoromethyl;

R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸ and R⁴⁹ are independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

R⁵⁰, R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, CH₂F and CF₃;

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$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, CHF_2 and CF_3 ;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

$R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, CHF_2 and CF_3 ;

$R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, fluoro, methyl, ethyl, methoxy, difluoromethoxy, trifluoromethoxy, CHF_2 and CF_3 ;

$R^{69'}$ is selected from hydrogen and C_1 - C_4 alkyl;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r and s are 0 and t is 1 or 0.

In another group of compounds, G^1 is a saturated C_{10} fused bicyclic ring system;

G^2 is a C_5 - C_6 cycloalkenyl group;

G^3 is phenyl;

G^4 is cyclohexyl or cyclopentyl;

G^5 is C_6 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-CH(CH_3)-CH_2-CH_2-CH_3$, $-CH-CH(CH_3)-CH_2-CH_3$, $-CH_2-CH_2-CH(CH_3)-CH_3$, $-CH_2-CH_2-CH(CH_3)_2$ and $-CH(CH_3)-CH(CH_3)_2$;

G^6 is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more methyl, bromine, iodine or chlorine;

G^7 is methylene;

G^{10} is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, methyl, ethyl, n-propyl, iso-propyl, ethenyl, methoxy, ethoxy, iso-propyloxy, phenyl, CHF_2 , CF_3 , $CHF-CH_3$ and $OCHF_2$;

G^{11} is methylene substituted by at least one group independently selected from methyl, CF_3 and ethyl;

G^{13} is a C_8 - C_{11} spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy and $=O$;

G^{17} is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 or 2 members selected from the group consisting of N, O and S, it not being possible for each ring system to contain $-O-O-$, $-S-S-$ and $-O-S-$ fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, phenyl or fluorophenyl;

R^1 , R^2 , R^3 , R^4 and R^5 are each hydrogen;

$R^{11'}$, $R^{12'}$, $R^{13'}$ and $R^{14'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 alkoxy;

$R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$, $R^{22'}$, $R^{23'}$, $R^{24'}$ and $R^{25'}$ are each independently selected from hydrogen, methyl, ethyl and isopropyl;

$R^{23'}$, $R^{24'}$ and $R^{25'}$ are each independently selected from hydrogen, fluorine, chlorine, bromine, methyl, ethyl and isopropyl;

$R^{26'}$ is $N-OH$, $N-O-C_1-C_4$ alkyl, $N-O-C_2-C_4$ alkenyl, $N-O-C_2-C_4$ alkynyl, $N-O-C_1-C_4$ haloalkyl, $N-O-C_2-C_4$ haloalkenyl, $N-O-benzyl$, $N-O-phenyl$, $N-O-halophenyl$, O , C_2-C_4 alkenyloxy and $C(R^{36'})$;

$R^{27'}$, $R^{28'}$, $R^{29'}$, $R^{30'}$, $R^{31'}$, $R^{32'}$, $R^{33'}$, $R^{34'}$ and $R^{35'}$ are each hydrogen or methyl; or $R^{27'}$ and $R^{28'}$ together with the two carbon atoms to which they are attached form a double bond;

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each $R^{36'}$ is independently selected from hydrogen, halogen and C_1 - C_4 alkyl;

$R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, methyl, CF_3 , CHF_2 , CH_2F , methoxy, difluoromethoxy and trifluoromethoxy;

$R^{50'}$, $R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are each hydrogen;

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen and halogen;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

$R^{61'}$, $R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are hydrogen;

$R^{69'}$ is hydrogen;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r, s and t are each 0.

In another preferred group of compounds, R^5 is G^1 .

In another preferred group of compounds, R^5 is G^2 .

In another preferred group of compounds, R^5 is G^3 - G^4 .

In another preferred group of compounds, R^5 is G^5 .

In another preferred group of compounds, R^5 is G^6 - G^7 .

In another preferred group of compounds, R^5 is G^8 .

In another preferred group of compounds, R^5 is G^9 .

In another preferred group of compounds, R^5 is G^{10} - G^{11} .

In another preferred group of compounds, R^5 is G^{12} .

In another preferred group of compounds, R^5 is G^{13} .

In another preferred group of compounds, R^5 is G^{14} .

In another preferred group of compounds, R^5 is G^{15} .

In another preferred group of compounds, R^5 is G^{16} .

In a further group of compounds, R_1 is selected from R^{1a} and R^{1b} ;

R_2 is methyl;

R_3 is selected from R^{3a} , R^{3b} , R^{3c} , R^{3d} , R^{3e} , R^{3f} , R^{3g} , R^{3h} , R^{3i} , R^{3j} , R^{3k} , R^{3l} , R^{3m} , R^{3n} , R^{3o} , R^{3p} , R^{3q} , R^{3r} , R^{3s} , R^{3t} ;

R_4 is selected from R_{4a} , R_{4b} , R_{4c} , R_{4d} , R_{4e} , R_{4f} ;

R_5 is selected from R^{5a} , R^{5b} , R^{5c} , R^{5d} , R^{5e} , R^{5f} , R^{5g} , R^{5h} , R^{5i} , R^{5j} , R^{5k} , R^{5l} , R^{5m} , R^{5n} , R^{5o} , R^{5p} , R^{5q} , R^{5r} , R^{5s} , R^{5t} , R^{5u} , R^{5v} , R^{5x} , R^{5y} , R^{5z} , R^{5ab} , R^{5ac} , R^{5ad} , R^{5ae} , R^{5af} , R^{5ag} , R^{5ah} , R^{5aj} , R^{5ak} , R^{5al} , R^{5am} , R^{5aa} , R^{5bb} , R^{5cc} , R^{5dd} , R^{5ee} , R^{5ff} , R^{5gg} , R^{5hh} , R^{5ij} , R^{5kk} , R^{5ll} , R^{5mm} , R^{5nn} , R^{5oo} , R^{5pp} , R^{5qq} , R^{5rr} , R^{5ss} , R^{5tt} , R^{5uu} , R^{5vv} , R^{5ww} , R^{5xx} , R^{5zz} , R^{5ba} , R^{5bd} , R^{5be} , R^{5bf} , R^{5bg} , R^{5bh} , R^{5bi} , R^{5bj} , R^{5bk} , R^{5bl} , R^{5bm} , R^{5bn} , R^{5bo} , R^{5bp} , R^{5bq} , R^{5br} , R^{5bs} , R^{5bt} , R^{5bu} , R^{5bv} , R^{5bw} , R^{5bx} , R^{5by} , R^{5bz} , R^{5ca} , R^{5cb} , R^{5cd} , R^{5ce} , R^{5cf} , R^{5cg} , R^{5ch} , R^{5ci} , R^{5cj} , R^{5ck} , R^{5cl} , R^{5cm} , R^{5cn} , R^{5co} , R^{5cp} , R^{5cq} , R^{5cr} , R^{5cs} , R^{5ct} , R^{5cu} , R^{5cv} , R^{5cw} , R^{5cx} , R^{5cy} , R^{5cz} , R^{5da} , R^{5db} , R^{5dc} , R^{5de} , R^{5df} , R^{5dg} , R^{5dh} , R^{5di} , R^{5dj} , R^{5dk} , R^{5dl} , R^{5dm} , R^{5dn} , R^{5do} , R^{5dp} , R^{5dq} , R^{5dr} , R^{5ds} , R^{5dt} , R^{5du} , R^{5dv} , R^{5dw} , R^{5dx} , R^{5ea} , R^{5eb} , R^{5ec} , R^{5ed} , R^{5ef} , R^{5eg} , R^{5eh} , R^{5ei} , R^{5ej} , R^{5ek} , R^{5ela} , R^{5em} , R^{5en} , R^{5eo} , R^{5ep} , R^{5eq} , R^{5er} , R^{5es} , R^{5et} , R^{5eu} , R^{5ev} , R^{5ex} , R^{5ey} , R^{5ez} , R^{5fa} , R^{5fb} , R^{5fc} , R^{5fd} , R^{5fe} , R^{5fg} , R^{5fh} , R^{5fi} , R^{5fj} , R^{5fk} , R^{5fl} , R^{5fm} , R^{5fn} , R^{5fo} , R^{5fp} , R^{5fq} , R^{5fr} , R^{5fs} , R^{5ft} , R^{5fu} , R^{5fv} , R^{5fw} ;

R_6 is selected from R^a , R^b and R^c ;

R_7 is H;

R^{1a} is selected from ethyl and isopropyl;

R^{1b} is ethyl;

R^{3a} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, CCH , $CH=CH_2$, $H_2C=C-(CH_3)$, cyclopropyl, halomethyl, haloethyl, methoxy, halomethoxy, ethoxy, haloethoxy, methylthio, halomethylthio, methylsulfinyl, haloethylsulfinyl, methylsulfonyl, halomethylsulfonyl, amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO, CH_2OH , $CH(OH)Me$ and CO-Me;

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R^{3b} is selected from hydrogen, F, Cl, Br, I, cyano, methyl, ethyl, isopropyl, fluoromethyl, difluoromethyl, trifluoromethyl, $(H_3C)-CHF$, methoxy and ethoxy;

R^{3c} is selected from hydrogen, F, Br, I, methyl, ethyl, isopropyl, fluoromethyl, difluoromethyl, trifluoromethyl, $(H_3C)-CHF$, methoxy and ethoxy;

R^{3d} is selected from hydrogen, halogen, cyano, methyl, ethyl, isopropyl, $C\equiv CH$, $CH=CH_2$, $H_2C=C-(CH_3)$, cyclopropyl, halomethyl, haloethyl, methoxy, ethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl, halomethylsulfonyl,

amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO and CO-Me;

R^{3b} is selected from hydrogen, F, Cl, Br, I, cyano, methyl, ethyl, isopropyl, fluoromethyl, difluoromethyl, trifluoromethyl, $(H_3C)-CHF$, methoxy and ethoxy;

R^{3c} is selected from hydrogen, F, Br, I, methyl, ethyl, isopropyl, fluoromethyl, difluoromethyl, trifluoromethyl, $(H_3C)-CHF$, methoxy and ethoxy;

R^{3e} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy, ethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl, halomethylsulfonyl, amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO, CH_2OH , $CH(OH)Me$ and CO-Me;

R^{3f} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy, ethoxy, methylythio, methylsulfinyl and methylsulfonyl;

R^{3g} is selected from hydrogen, F, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, ethoxy, methylythio, methylsulfinyl and methylsulfonyl;

R^{3h} is selected from hydrogen, Br, I, methyl, ethyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F and methoxy;

R^{3i} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy, ethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl, halomethylsulfonyl, amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO and CO-Me;

R^{3j} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, halomethyl, haloethyl, methoxy and ethoxy;

R^{3k} is selected from hydrogen, halogen, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , methoxy and ethoxy;

R^{3l} is selected from hydrogen, halogen, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , methoxy and ethoxy;

R^{3m} is selected from hydrogen, F, Br, I, methyl, ethyl, CHF_2 and methoxy;

R^{3n} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy, ethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl, halomethylsulfonyl, amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO, CH_2OH , $CH(OH)Me$ and CO-Me;

R^{3o} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$,

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halomethyl, haloethyl, methoxy, ethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl and halomethylsulfonyl;

R^{3p} is selected from hydrogen, F, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy and ethoxy;

R^{3q} is selected from hydrogen, F, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, ethoxy, methylythio, methylsulfinyl and methylsulfonyl;

R^{3r} is selected from hydrogen, Br, I, methyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$ and methoxy;

R^{3s} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, tert-butyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy, halomethoxy, ethoxy, haloethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl, halomethylsulfonyl, amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO and $C(=O)Me$;

R^{3t} is selected from hydrogen, halogen, CN, methyl, ethyl, isopropyl, cyclopropyl, tert-butyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, halomethyl, haloethyl, methoxy, halomethoxy, ethoxy, haloethoxy, methylythio, halomethylthio, methylsulfinyl, halomethylsulfinyl, methylsulfonyl, halomethylsulfonyl, amino, methylamino, dimethylamino, ethylamino, diethylamino, ethylmethylamino, pyrrolidino, imidazolino, triazolino, CHO and $C(=O)Me$;

R_{4a} is selected from F, Cl, Br, C_1-C_4 alkyl, C_1-C_4 alkenyl, C_1-C_4 haloalkyl and C_1-C_4 cycloalkyl;

R_{4b} is selected from F, Cl, methyl, ethyl, ethenyl, propyl, propenyl, isopropyl, isopropenyl, cyclopropanyl, methoxy, ethoxy, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoromethyl

R_{4c} is selected from methyl, ethyl, methoxy, F and Cl;

R_{4d} is selected from methyl, methoxy, F and Cl;

R_{4e} is selected from methyl;

R_{4f} is selected from methoxy, F and Cl;

R^{5a} is a 3- to 6-membered cycloalkenyl group, or a 3- to 6-membered cycloalkenyl group that can be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, CN, NO_2 , OH, SH, CHO, COOH, tri(C_1-C_6 alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-CH(CH_3)-CH_2-CH_2-CH_3$, $-CH-CH(CH_3)-CH_2-CH_3$, $-CH_2-CH_2-CH(CH_3)-CH_3$, $-CH_2-CH_2-CH(CH_3)_2$, $-CH(CH_3)-CH(CH_3)_2$, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_2-C_6 alkenyl, C_2-C_6 haloalkenyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_2-C_7 alkylcarbonyl, C_2-C_7 alkoxycarbonyl, C_4-C_7 alkenyloxycarbonyl, C_4-C_7 alkynyloxycarbonyl, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, $-C(=O)NH_2$, $-C(=O)NH(CH_3)$, $-C(=O)N(CH_3)_2$ and $-C(=S)NH_2$;

R^{5b} is a 3- to 6-membered cycloalkenyl group, or a 3- to 6-membered cycloalkenyl group that can be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-CH(CH_3)-CH_2-CH_2-CH_3$, $-CH-CH(CH_3)-CH_2-CH_3$, $-CH_2-CH_2-CH(CH_3)-CH_3$, $-CH_2-CH_2-CH(CH_3)_2$, $-CH(CH_3)-CH(CH_3)_2$, C_1-C_6 haloalkyl, C_1-C_6 alkoxy and C_1-C_6 alkylthio;

R^{5c} is a 3- to 6-membered cycloalkenyl group, or a 3- to 6-membered cycloalkenyl group that can be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, ethyl, n-propyl, iso-propyl,

R^{SP} is a 3-membered cycloalkyl group, or a 3-membered
cycloalkyl group that can be mono- to polysubstituted by
substituents independently selected from the group consist-
65 ing of halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl,
sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—
CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH₂—CH₃

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(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₁-C₆ fluoroalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio;

R^{5ae} is G^8 wherein R^1 , R^2 , R^3 , R^4 and R^5 are each independently selected from hydrogen, fluoro, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 alkylthio;

and wherein R^{11} , R^{12} , R^{13} , and R^{14} are each independently selected from hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halocycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonyl;

R^{5af} is G⁸ wherein R^{1'}, R^{2'}, R^{3'}, R^{4'} and R^{5'} are each independently selected from hydrogen, fluoro, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

and wherein R^{11} , R^{12} , R^{13} and R^{14} are each independently selected from hydrogen, halogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy and C_1 - C_6 alkylthio;

R^{5ag} is G^8 wherein $R^{1'}$, $R^{2'}$, $R^{3'}$, $R^{4'}$ and $R^{5'}$ are each independently selected from hydrogen, fluoro, methyl, ethyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , methoxy, ethoxy, $S-CH_3$ and $S-CH_2CH_3$;

and wherein R^{11'}, R^{12'}, R^{13'} and R^{14'} are each independently selected from hydrogen, halogen, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

R^{5ah} is G⁸ wherein R¹, R², R³, R⁴ and R^{5'} are each independently selected from hydrogen, fluoro, methyl, CHF₂, CF₃ and methoxy;

and wherein R^{11} , R^{12} , R^{13} and R^{14} are each independently selected from hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halocycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonfyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonfyl;

R^{5aj} is G^8 wherein $R^{1'}$, $R^{2'}$, $R^{3'}$, $R^{4'}$ and $R^{5'}$ are each independently selected from hydrogen, fluoro, methyl, CHF_2 , CF_3 , and methoxy;

and wherein R^{11} , R^{12} , R^{13} and R^{14} are each independently selected from hydrogen, halogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy and C_1 - C_6 alkylthio;

R^{5ak} is G^8 wherein R^1, R^2, R^3, R^4 and $R^{5'}$ are each independently selected from hydrogen, fluoro, methyl, CHF_2 , CF_3 and methoxy;

and wherein R^{11} , R^{12} , R^{13} and R^{14} are each independently selected from hydrogen, halogen, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 alkylthio;

R^{5al} is G⁸ wherein R¹, R², R³, R⁴ and R⁵ are each hydrogen;

and wherein R^{11} , R^{12} , R^{13} and R^{14} are each independently selected from hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halocycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio,

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C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{5am} is G^8 wherein R^1, R^2, R^3, R^4 and R^5 are each hydrogen;

and wherein $R^{11'}$, $R^{12'}$, $R^{13'}$ and $R^{14'}$ are each independently selected from hydrogen, halogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy and C_1 - C_6 alkylthio;

R^{5aa} is G⁸ wherein R^{1'}, R^{2'}, R^{3'}, R^{4'} and R^{5'} are each hydrogen;

and wherein $R^{11'}$, $R^{12'}$, $R^{13'}$ and $R^{14'}$ are each independently selected from hydrogen, halogen, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 alkylthio;

R^{5bb} is a benzyl group, wherein the phenyl ring is substituted by at least one fluorine and optionally by one or more groups independently selected from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonfyl and C₁-C₆ haloalkylsulfonfyl;

R^{5cc} is a benzyl group, wherein the phenyl ring is substituted by at least one fluorine and optionally by one or more groups independently selected from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl;

R^{5dd} is a benzyl group, wherein the phenyl ring is substituted by at least one fluorine and optionally by one or more groups independently selected from the group consisting of hydrogen, halogen, CN, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy and C₁-C₆ alkylthio;

R^{See} is a benzyl group, wherein the phenyl ring is substituted by at least one fluorine and optionally by one or more groups independently selected from the group consisting of hydrogen, halogen, CN, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₆ cycloalkyl and C₁-C₄ alkoxy;

R^{5f} is a benzyl group, wherein the methylene portion is substituted by at least one group independently selected from the group consisting of hydrogen, C₁-C₄ alkyl, C₁-C₄ haloalkyl, CN, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

and wherein the phenyl ring is optionally substituted by one or more groups independently selected from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{5sg} is a benzyl group, wherein the methylene portion is substituted by at least one group independently selected from the group consisting of hydrogen, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₁-C₄ alkoxy;

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R^{5rr} is a benzyl group, wherein the methylene portion is substituted one group independently selected from the group consisting of methyl, ethyl, CHF₂, CF₃ and methoxy;

and wherein the phenyl ring is optionally substituted by one or more groups independently selected from the group consisting of hydrogen, halogen, CN, OH, SH, CHO, methyl, ethyl, n-propyl, iso-propyl, CH_2F , CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$, CF_2-CH_3 , CF_2-CF_3 , cyclopropyl, $\text{CH}=\text{CH}_2$, $\text{C}(\text{CH}_3)=\text{CH}_2$, $\text{CH}=\text{CH}(\text{CH}_3)$, $\text{C}(\text{CH}_3)=\text{CH}(\text{CH}_3)$, $\text{CH}=\text{C}(\text{CH}_3)_2$, $\text{C}(\text{CH}_3)=\text{C}(\text{CH}_3)_2$, $\text{CH}=\text{CF}_2$, $\text{CH}=\text{CCl}_2$, $\text{C}=\text{CH}$, methoxy, ethoxy, iso-propyloxy, OCHF_2 , $\text{OCH}_2-\text{C}=\text{CH}$, $\text{OCH}(\text{CH}_3)-\text{C}=\text{CH}$, SCH_3 , SCH_2CH_3 , $\text{S}(\text{O})\text{CH}_3$, $\text{S}(\text{O})\text{CH}_2\text{CH}_3$, $\text{S}(\text{O})_2\text{CH}_3$ and $\text{S}(\text{O})_2\text{CH}_2\text{CH}_3$;

R^{5ss} , R^{9} wherein $R^{15'}$ and $R^{16'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl and C_3 - C_6 cycloalkyl;

each R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_3 - C_6 cycloalkyl;

R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

$R^{5''}$ is G^9 wherein each $R^{1'5'}$, $R^{1'6'}$, $R^{1'7'}$, $R^{1'8'}$, $R^{1'9'}$, $R^{2'0'}$, $R^{2'1'}$ and $R^{2'2'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl:

R^{23} , R^{24} and R^{25} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halocycloalkyl and C_1 - C_4 alkylthio;

n is either 0 or 1;

$R^{5'iv}$ is G^9 wherein each $R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ are selected independently of each other, from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

$R^{23'}$, $R^{24'}$ and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halocycloalkyl and C_1 - C_4 alkylthio;

n is either 0 or 1;

R^{5v} is G⁹ wherein $R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ are each hydrogen;

R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is either 0 or 1;

R^{5_{new}} is G⁹ wherein R^{15'} and R^{16'} are selected independently of each other, from the group consisting of methyl, F and CF₃;

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is either 0 or 1;

R^{5xx} is G⁹ wherein R¹⁵ⁱ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

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each R^{16'}, R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} are hydrogen; R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is either 0 or 1;

R^{5zz} is G^9 wherein $R^{15'}$ and $R^{16'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl and C_3 - C_6 cycloalkyl:

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₂-C₆ cycloalkyl;

R^{23} , R^{24} and R^{25} are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, fluoromethyl and fluoroethyl;

R^{5ba} is G^9 wherein each R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

$R^{23'}$, R^{24} and R^{25} are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl:

n is either 0 or 1:

³⁰ R^{Sbc} is G^9 wherein each $R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ are selected independently of each other, from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

³⁵ R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

n is either 0 or 1;

40 R^{5bd} is G⁹ wherein R^{15'}, R^{16'}, R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} are each hydrogen:

R^{22'} to R^{24'} are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, 45 monofluoroethyl, and polyfluoroethyl;

n is either 0 or 1:

R^{5be} is G^9 wherein $R^{15'}$ and $R^{16'}$ are selected independently of each other, from the group consisting of methyl, F and CF_3 ;

each other, from the group consisting of methyl, 1 and C₁₋₃, each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

$R^{2'3'}$, $R^{2'4'}$, and $R^{2'5'}$ are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

n is either 0 or 1:

R^{5bf} is G⁹ wherein R^{15'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ is hydrogen; $R^{23'}$, $R^{24'}$ and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

n is either 0 or 1:

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R^{5bg} is G⁹ wherein R^{15'} and R^{16'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

$R^{23'}$, $R^{24'}$, and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_3 ;

R^{5hh} is G^9 wherein each $R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

R^{23} , R^{24} , and R^{25} , are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_3 ;

n is either 0 or 1;

R^{5bi} is G^9 wherein each R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

$R^{23'}$, $R^{24'}$, and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

n is either 0 or 1;

R^{5bj} is G^9 wherein $R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ are each hydrogen;

$R^{23'}$, R^{24} and R^{25} are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_3 ;

n is either 0 or 1;

R^{5bk} is G^9 wherein $R^{15'}$ and $R^{16'}$ are selected independently of each other, from the group consisting of methyl, F and CF_3 ;

each other, form a group consisting of R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_3 - C_6 cycloalkyl;

$R^{23'}$, $R^{24'}$, and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_3 ;

n is either 0 or 1;

R^{5bl} is G⁹ wherein R^{15'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each $R^{16'}$, R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and $R^{22'}$ is hydrogen; $R^{22'}$ to $R^{24'}$ are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$, CF_2-CH_3 , $\text{CH}_2-\text{CH}_2\text{F}$, CH_2-CHF_2 , and CH_2-CF_3 ;

n is either 0 or 1;

R^{5bm} is G^9 wherein $R^{15'}$ and $R^{16'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl and C_3 - C_6 cycloalkyl:

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

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R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is 0;

R^{5bn} is G^9 wherein each R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl:

$R^{23'}$, $R^{24'}$ and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halocycloalkyl and C_1 - C_4 alkylthio;

n is 0;

R^{5bo} is G^9 wherein each R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_3 ;

R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is 0;

R^{5bp} P is G⁹ wherein R^{15'}, R^{16'}, R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} are each hydrogen;

R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is 0:

R^{5bq} is G^9 wherein $R^{15'}$ and $R^{16'}$ are selected independently of each other, from the group consisting of methyl, F and CF_3 ;

each other, from the group consisting of methyl, C_1 and C_2 , each R^{17} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_3 - C_6 cycloalkyl;

R^{23'}, R^{24'} and R^{25'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

n is 0;

R^{5br} is G⁹ wherein R^{15'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R^{16'}, R^{17'}, R^{18'}, R^{19'}, R^{20'}, R^{21'} and R^{22'} is selected independently of each other, from the group consisting of hydrogen;

R^{23} , $R^{24'}$ and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_3 - C_6 cycloalkyl, C_3 - C_6 halocycloalkyl and C_1 - C_4 alkylthio;

n is 0;

R^{5bs} is G⁹ wherein R^{15'} and R^{16'} are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

$R^{23'}$, $R^{24'}$ and $R^{25'}$ are selected independently of each other, from the group consisting of hydrogen, cyano, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

n is 0;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are each hydrogen; $R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halo-

cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p and q are independently selected from 0 and 1;

R^{5de} is G¹⁴ wherein R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C=CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl:

p and q are independently selected from 0 and 1:

R^{5df} : is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl:

p and q are independently selected from 0 and 1;

R^{Sdg} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are independently selected from 0 and 1:

R^{5dh} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$ and $44'$ are selected independently of each other from the group consisting of methyl, ethyl, F and CF_3 ;

R^{45} , R^{46} , R^{47} , R^{48} , and R^{49} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C=CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl:

p and q are independently selected from 0 and 1:

R^{5di} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl:

p and q are independently selected from 0 and 1:

R^{5dj} is G^{14} wherein R^{37i} is selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³ and R⁴⁴ are each hydrogen; R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸ and R⁴⁹ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br,

I, methyl, ethyl, isopropyl, cyclopropyl, $\text{C}\equiv\text{CH}$, $\text{CH}=\text{CH}_2$, $\text{C}(\text{CH}_3)=\text{CH}_2$, CF_3 , CHF_2 , CH_2F , $-\text{CHF}-\text{CH}_3$, $-\text{CF}_2-\text{CH}_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are independently selected from 0 and 1;

R^{5dk} is G¹⁴ wherein R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p and q are independently selected from 0 and 1;

R^{5dl} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₃, CH₂F, methoxy and trifluoromethoxy;

p and q are independently selected from 0 and 1;

R^{5dm} is G^{14} wherein R^{37} , R^{38} , R^{39} , R^{40} , R^{41} , R^{42} , R^{43} , and R^{44} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

$R^{45}, R^{46}, R^{47}, R^{48}$ and R^{49} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p and q are independently selected from 0 and 1;

R^{5dn} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$ and R^{44} are selected independently of each other from the group consisting of methyl, ethyl, F and CF_3 ;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₃, CH₃F, methoxy and trifluoromethoxy;

p and q are independently selected from 0 and 1:

R^{5do} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$ and R^{44} are each hydrogen;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₃, CH₂F, methoxy and trifluoromethoxy;

p and q are independently selected from 0 and 1;

R^{5dp} is G¹⁴ wherein R^{37'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45}, R^{46}, R^{47}, R^{48}$ and R^{49} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p and q are independently selected from 0 and 1:

R^{5dq} is G^{14} wherein $R^{37'}$ and $R^{38'}$ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

R^{39} , R^{40} , R^{41} , R^{42} , R^{43} and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, and C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C-*C*₆ alkyl,

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C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p and q are each 0;

R^{5dr} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

R^{45'}, R^{46'}, R^{47'}, R^{48'}, and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfonfyl, C₁-C₆ haloalkylsulfonfyl, C₁-C₆ alkylsulfonfyl and C₁-C₆ haloalkylsulfonfyl.

p and q are each 0;

R^{5ds} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halo-cycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfonfyl, $\text{C}_1\text{-C}_6$ haloalkylsulfonfyl, $\text{C}_1\text{-C}_6$ alkylsulfonfyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonfyl;

p and q are each 0;

R^{5dt} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of methyl, ethyl, F and CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ haloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonyl.

p and q are each 0;

R^{5du} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C-, C₂-alkyl,

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C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfynyl, C₁-C₆ haloalkylsulfynyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p and q are each 0;

R^{5dv} is G¹⁴ wherein R^{37'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halocycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfynyl, $\text{C}_1\text{-C}_6$ haloalkylsulfynyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonyl;

p and q are each 0;

R^{5dw} is G^{14} wherein $R^{37'}$ and $R^{37''}$ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

R^{45} , R^{46} , R^{47} , R^{48} , and R^{49} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C=CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are each 0;

R^{5dx} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C=CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are each 0;

R^{Sea} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C=CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are each 0:

R^{eb} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently from each other from the group consisting of methyl, ethyl, F and CF_3 ;

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$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C=CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are each 0;

R^{5ec} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are each 0;

R^{5ed} is G¹⁴ wherein R^{37'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p and q are each 0;

R^{5ef} is G¹⁴ wherein R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected indepen-

dently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p and q are each 0;

R^{5eg} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p and q are each 0;

R^{5eh} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF , and CH_2-CF_2 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p and q are each 0;

R^{5ei} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$ and R^{44} are selected independently of each other from the group consisting of methyl, ethyl, F and CF_3 ;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p and q are each 0;

R^{5ej} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

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R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p and q are each 0;

R^{5ek} is G¹⁴ wherein R³⁷ⁱ is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 0;

q is 1;

$R^{37'}$ is G^{14} wherein $R^{37'}$ and $R^{38'}$ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected indepen-

20 dently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of

each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfonyle, C₁-C₆ haloalkylsulfonyle, C₁-C₆ alkylsulfonyle and C₁-C₆ haloalkylsulfonyle;

p is 0;

q is 1:

35 R^{5em} is G^{14} wherein R^{37} , R^{38} , R^{39} , R^{40} , R^{41} , R^{42} , R^{43} , and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl:

40 R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃),

$$(\text{=O})\text{N}(\text{CH}_3)_2, \text{C}(\text{=S})\text{NH}_2, \text{C}(\text{=S})\text{NH}(\text{CH}_3), \text{C}(\text{=S})\text{N}$$

(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p is 0;

q is 1:

⁵⁵ $R^{5en}, R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43},$ and R^{44} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-

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cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p is 0;

q is 1;

R^{5eo} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are independently selected of each other from the group consisting of methyl, ethyl, F and CF₃;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p is 0;

q is 1;

R^{5ep} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p is 0;

q is 1;

R^{5eq} is G¹⁴ wherein R^{37'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p is 0;

q is 1;

R^{5er} is G¹⁴ wherein R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—

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CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p is 0;

q is 1;

5 R^{5es} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

10 R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p is 0;

q is 1;

20 R^{5et} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, CH₂—CH₂F, CH₂—CHF₂ and CH₂—CF₃;

25 R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p is 0;

q is 1;

30 R^{5eu} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of methyl, ethyl, F and CF₃;

35 R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p is 0;

q is 1;

40 R^{5ev} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

45 R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p is 0;

q is 1;

50 R^{5ex} is G¹⁴ wherein R^{37'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

55 R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen; R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, C≡CH, CH=CH₂, C(CH₃)=CH₂, CF₃, CHF₂, CH₂F, —CHF—CH₃, —CF₂—CH₃, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

p is 0;

q is 1;

65 R^{5ey} is G¹⁴ wherein R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

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$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 0;

q is 1;

R^{15ez} is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl:

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p is 0;

q is 1;

$R^{5'a}$ is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 0;

q is 1:

R^{5fb} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of methyl, ethyl, F and CF₃;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 0;

q is 1:

R^{5fc} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 0;

q is 1:

R^{5fd} is G¹⁴ wherein R^{37'} is selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen:

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 0;

q is 1;

R^{5fe} is G¹⁴ wherein R^{37'} and R^{38'} are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$, and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$, and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_3\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$

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alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfynyl, C₁-C₆ haloalkylsulfynyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

p is 1:

q is 1;

$R^{5/8}$ is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halo-cycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonyl;

p is 1:

q is 1:

$R^{5/7h}$ is G^{14} wherein $R^{37}, R^{38}, R^{39}, R^{40}, R^{41}, R^{42}, R^{43}$, and R^{44} are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 , and CH_2-CF_3 ;

R^{45} , R^{46} , R^{47} , R^{48} and R^{49} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkynyloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halo-cycloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfonyl, $\text{C}_1\text{-C}_6$ haloalkylsulfonyl, $\text{C}_1\text{-C}_6$ alkylsulfonfyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonfyl;

p is 1:

q is 1:

R^{5f} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of methyl, ethyl, F and CF_3 ;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halo-cycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfonfyl, C₁-C₆ haloalkylsulfonfyl, C₁-C₆ alkylsulfonfyl and C₁-C₆ haloalkylsulfonfyl;

p is 1:

q is 1:

R^{5f} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$,

$C(=O)N(CH_3)_2$, $C(=S)NH_2$, $C(=S)NH(CH_3)$, $C(=S)N(CH_3)_2$, SO_2NH_2 , $SO_2NH(CH_3)$, $SO_2N(CH_3)_2$, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_3 - C_6 cycloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 haloalkenyloxy, C_3 - C_6 alkynyloxy, C_3 - C_6 cycloalkoxy, C_3 - C_6 haloalkenyloxy, C_1 - C_6 alkylthio, C_1 - C_6 haloalkylthio, C_1 - C_6 alkylsulfanyl, C_1 - C_6 haloalkylsulfanyl, C_1 - C_6 alkylsulfonyl and C_1 - C_6 haloalkylsulfonyl;

p is 1;

q is 1;

R^{5fk} is G^{14} wherein $R^{37'}$ is selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $C(=O)NH_2$, $C(=O)NH(CH_3)$, $C(=O)N(CH_3)_2$, $C(=S)NH_2$, $C(=S)NH(CH_3)$, $C(=S)N(CH_3)_2$, SO_2NH_2 , $SO_2NH(CH_3)$, $SO_2N(CH_3)_2$, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_3 - C_6 cycloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 haloalkenyloxy, C_3 - C_6 alkynyloxy, C_3 - C_6 cycloalkoxy, C_3 - C_6 haloalkenyloxy, C_1 - C_6 alkylthio, C_1 - C_6 haloalkylthio, C_1 - C_6 alkylsulfanyl, C_1 - C_6 haloalkylsulfanyl, C_1 - C_6 alkylsulfonyl and C_1 - C_6 haloalkylsulfonyl;

p is 1;

q is 1;

R^{5fl} is G^{14} wherein $R^{37'}$ and $R^{38'}$ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl;

p is 1;

q is 1;

R^{5fm} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl;

p is 1;

q is 1;

R^{5fn} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 and CH_2-CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-$

CH_3 , methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl;

p is 1;

q is 1;

R^{5fo} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of methyl, ethyl, F and CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl;

p is 1;

q is 1;

R^{5fp} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are each hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl;

p is 1;

q is 1;

R^{5fq} is G^{14} wherein $R^{37'}$ is selected from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, Br, I, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfanyl and methylsulfonyl;

p is 1;

q is 1;

R^{5fr} is G^{14} wherein $R^{37'}$ and $R^{38'}$ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy and C_1 - C_4 alkylthio;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p is 1;

q is 1;

R^{5fs} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p is 1;

q is 1;

R^{5ft} is G^{14} wherein $R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, isopropyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CH_2-CH_2F , CH_2-CHF_2 and CH_2-CF_3 ;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF_3 , CHF_2 , CH_2F , methoxy and trifluoromethoxy;

p is 1;
q is 1;
R^{5fu} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected independently of each other from the group consisting of methyl, ethyl, F and CF₃;
R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 1;
q is 1;
R^{5fv} is G¹⁴ wherein R^{37'}, R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are each hydrogen;
R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of each other, from the group consisting of hydrogen, F, Cl, methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 1;
q is 1;
R^{5fw} is G¹⁴ wherein R^{37'} is selected from hydrogen, halo-

gen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;
R^{38'}, R^{39'}, R^{40'}, R^{41'}, R^{42'}, R^{43'} and R^{44'} are selected inde-

pendently of each other from the group consisting of hydro-
gen, fluorine, methyl, ethyl, isopropyl, CH₂F, CHF₂, CF₃,
CHF—CH₃, CF₂—CH₃, CH₂—CH₂F, CH₂—CHF₂ and
CH₂—CF₃;

R^{45'}, R^{46'}, R^{47'}, R^{48'} and R^{49'} are selected, independently of
each other, from the group consisting of hydrogen, F, Cl,
methyl, CF₃, CHF₂, CH₂F, methoxy and trifluoromethoxy;

p is 1;
q is 1;
R^{6a} is selected from hydrogen and SH;
R^{6b} is hydrogen;

R^{6c} is SH.

Each line of Table N describes a preferred sub-group from
N1-N757 of this group. For reasons of clarity, note that in
these sub-groups, R₂ is always methyl and R₇ is always
hydrogen. For example, sub-group N1 is a group of com-
pounds of formula (I) wherein

R₁ is R^{1b};
R₂ is methyl;
R₃ is R^{3a};
R₄ is R^{4c};
R₅ is R^{5a};
R₆ is R^{6b};
R₇ is H.

TABLE N

	R ₁	R ₃	R ₄	R ₅	R ₆
N1	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5a}	R ^{6b}
N2	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5a}	R ^{6b}
N3	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5a}	R ^{6b}
N4	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5b}	R ^{6b}
N5	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5b}	R ^{6b}
N6	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5b}	R ^{6b}
N7	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5c}	R ^{6b}
N8	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5c}	R ^{6b}
N9	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5c}	R ^{6b}
N10	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5d}	R ^{6b}
N11	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5d}	R ^{6b}
N12	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5d}	R ^{6b}
N13	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5e}	R ^{6b}
N14	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5e}	R ^{6b}
N15	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5e}	R ^{6b}
N16	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5f}	R ^{6b}
N17	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5f}	R ^{6b}
N18	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5f}	R ^{6b}
N19	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5g}	R ^{6b}
N20	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5g}	R ^{6b}
N21	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5g}	R ^{6b}
N22	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5h}	R ^{6b}

TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N23	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5h}	R ^{6b}
N24	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5h}	R ^{6b}
N25	R ^{1b}	R ^{3a}	R ^{4c}	R ^{5j}	R ^{6b}
N26	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5j}	R ^{6b}
N27	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5j}	R ^{6b}
N28	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5k}	R ^{6b}
N29	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5k}	R ^{6b}
N30	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5k}	R ^{6b}
N31	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5l}	R ^{6b}
N32	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5l}	R ^{6b}
N33	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5l}	R ^{6b}
N34	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5m}	R ^{6b}
N35	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5m}	R ^{6b}
N36	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5m}	R ^{6b}
N37	R ^{1b}	R ^{3d}	R ^{4c}	R ⁵ⁿ	R ^{6b}
N38	R ^{1b}	R ^{3b}	R ^{4d}	R ⁵ⁿ	R ^{6b}
N39	R ^{1b}	R ^{3c}	R ^{4e}	R ⁵ⁿ	R ^{6b}
N40	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5o}	R ^{6b}
N41	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5o}	R ^{6b}
N42	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5o}	R ^{6b}
N43	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5p}	R ^{6b}
N44	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5p}	R ^{6b}
N45	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5p}	R ^{6b}
N46	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5q}	R ^{6b}
N47	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5q}	R ^{6b}
N48	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5q}	R ^{6b}
N49	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5r}	R ^{6b}
N50	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5r}	R ^{6b}
N51	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5r}	R ^{6b}
N52	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5s}	R ^{6b}
N53	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5s}	R ^{6b}
N54	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5s}	R ^{6b}
N55	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5t}	R ^{6b}
N56	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5t}	R ^{6b}
N57	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5t}	R ^{6b}
N58	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5u}	R ^{6b}
N59	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5u}	R ^{6b}
N60	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5u}	R ^{6b}
N61	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5v}	R ^{6b}
N62	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5v}	R ^{6b}
N63	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5v}	R ^{6b}
N64	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5x}	R ^{6b}
N65	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5x}	R ^{6b}
N66	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5x}	R ^{6b}
N67	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5y}	R ^{6b}
N68	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5y}	R ^{6b}
N69	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5y}	R ^{6b}
N70	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5z}	R ^{6b}
N71	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5z}	R ^{6b}
N72	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5z}	R ^{6b}
N73	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5ab}	R ^{6b}
N74	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5ab}	R ^{6b}
N75	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5ab}	R ^{6b}
N76	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5ac}	R ^{6b}
N77	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5ac}	R ^{6b}
N78	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5ac}	R ^{6b}
N79	R ^{1b}	R ^{3d}	R ^{4c}	R ^{5ad}	R ^{6b}
N80	R ^{1b}	R ^{3b}	R ^{4d}	R ^{5ad}	R ^{6b}
N81	R ^{1b}	R ^{3c}	R ^{4e}	R ^{5ad}	R ^{6b}
N82	R ^{1b}	R ^{3e}	R ^{4c}	R ^{5bb}	R ^{6b}
N83	R ^{1b}	R ^{3f}	R ^{4c}	R ^{5bb}	R ^{6b}
N84	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bb}	R ^{6b}
N85	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bb}	R ^{6b}
N86	R ^{1b}	R ^{3e}	R ^{4c}	R ^{5cc}	R ^{6b}
N87	R ^{1b}	R ^{3f}	R ^{4c}	R ^{5cc}	R ^{6b}
N88	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5cc}	R ^{6b}
N89	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5cc}	R ^{6b}
N90	R ^{1b}	R ^{3e}	R ^{4c}	R ^{5dd}	R ^{6b}
N91	R ^{1b}	R ^{3f}	R ^{4c}	R ^{5dd}	R ^{6b}
N92	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5dd}	R ^{6b}
N93	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5dd}	R ^{6b}
N94	R ^{1b}	R ^{3e}	R ^{4c}	R ^{5ee}	R ^{6b}
N95	R ^{1b}	R ^{3f}	R ^{4c}	R ^{5ee}	R ^{6b}
N96	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ee}	R ^{6b}
N97	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ee}	R ^{6b}
N98	R ^{1b}	R ³ⁱ	R ^{4c}	R ^{5ae}	R ^{6a}
N99	R ^{1b}	R ^{3j}	R ^{4c}	R ^{5af}	R ^{6b}
N100	R ^{1b}	R ^{3k}	R ^{4c}	R ^{5ag}	R ^{6a}

TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N101	R ^{1b}	R ^{3k}	R ^{4c}	R ^{5ag}	R ^{6b}
N102	R ^{1b}	R ^{3l}	R ^{4c}	R ^{5ag}	R ^{6c}
N103	R ^{1b}	R ³ⁱ	R ^{4e}	R ^{5ae}	R ^{6a}
N104	R ^{1b}	R ^{3j}	R ^{4e}	R ^{5af}	R ^{6b}
N105	R ^{1b}	R ^{3k}	R ^{4e}	R ^{5ag}	R ^{6a}
N106	R ^{1b}	R ^{3k}	R ^{4e}	R ^{5ag}	R ^{6b}
N107	R ^{1b}	R ^{3l}	R ^{4e}	R ^{5ag}	R ^{6c}
N108	R ^{1b}	R ³ⁱ	R ^{4f}	R ^{5ae}	R ^{6a}
N109	R ^{1b}	R ^{3j}	R ^{4f}	R ^{5af}	R ^{6b}
N110	R ^{1b}	R ^{3k}	R ^{4f}	R ^{5ag}	R ^{6a}
N111	R ^{1b}	R ^{3k}	R ^{4f}	R ^{5ag}	R ^{6b}
N112	R ^{1b}	R ^{3l}	R ^{4f}	R ^{5ag}	R ^{6c}
N113	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ae}	R ^{6a}
N114	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5af}	R ^{6b}
N115	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ag}	R ^{6a}
N116	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ag}	R ^{6b}
N117	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ag}	R ^{6c}
N118	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ae}	R ^{6a}
N119	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5af}	R ^{6b}
N120	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ag}	R ^{6a}
N121	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ag}	R ^{6b}
N122	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ag}	R ^{6c}
N123	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ae}	R ^{6a}
N124	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5af}	R ^{6b}
N125	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ag}	R ^{6a}
N126	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ag}	R ^{6b}
N127	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ag}	R ^{6c}
N128	R ^{1b}	R ³ⁱ	R ^{4c}	R ^{5ah}	R ^{6a}
N129	R ^{1b}	R ^{3j}	R ^{4c}	R ^{5ai}	R ^{6b}
N130	R ^{1b}	R ^{3k}	R ^{4c}	R ^{5ak}	R ^{6a}
N131	R ^{1b}	R ^{3k}	R ^{4c}	R ^{5ak}	R ^{6b}
N132	R ^{1b}	R ^{3l}	R ^{4c}	R ^{5ak}	R ^{6c}
N133	R ^{1b}	R ³ⁱ	R ^{4e}	R ^{5ah}	R ^{6a}
N134	R ^{1b}	R ^{3j}	R ^{4e}	R ^{5ai}	R ^{6b}
N135	R ^{1b}	R ^{3k}	R ^{4e}	R ^{5ak}	R ^{6a}
N136	R ^{1b}	R ^{3k}	R ^{4e}	R ^{5ak}	R ^{6b}
N137	R ^{1b}	R ^{3l}	R ^{4e}	R ^{5ak}	R ^{6c}
N138	R ^{1b}	R ³ⁱ	R ^{4f}	R ^{5ah}	R ^{6a}
N139	R ^{1b}	R ^{3j}	R ^{4f}	R ^{5ai}	R ^{6b}
N140	R ^{1b}	R ^{3k}	R ^{4f}	R ^{5ak}	R ^{6a}
N141	R ^{1b}	R ^{3k}	R ^{4f}	R ^{5ak}	R ^{6b}
N142	R ^{1b}	R ^{3l}	R ^{4f}	R ^{5ak}	R ^{6c}
N143	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ah}	R ^{6a}
N144	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ai}	R ^{6b}
N145	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ak}	R ^{6a}
N146	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ak}	R ^{6b}
N147	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ak}	R ^{6c}
N148	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ah}	R ^{6a}
N149	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ai}	R ^{6b}
N150	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ak}	R ^{6a}
N151	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ak}	R ^{6b}
N152	R ^{1b}	R ^{3m}	R ^{4e}	R ^{5ak}	R ^{6c}
N153	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ah}	R ^{6a}
N154	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ai}	R ^{6b}
N155	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ak}	R ^{6a}
N156	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ak}	R ^{6b}
N157	R ^{1b}	R ^{3m}	R ^{4f}	R ^{5ak}	R ^{6c}
N158	R ^{1b}	R ³ⁱ	R ^{4c}	R ^{5al}	R ^{6a}
N159	R ^{1b}	R ^{3j}	R ^{4c}	R ^{5am}	R ^{6b}
N160	R ^{1b}	R ^{3k}	R ^{4c}	R ^{5an}	R ^{6a}
N161	R ^{1b}	R ^{3k}	R ^{4c}	R ^{5an}	R ^{6b}
N162	R ^{1b}	R ^{3l}	R ^{4c}	R ^{5an}	R ^{6c}
N163	R ^{1b}	R ³ⁱ	R ^{4e}	R ^{5al}	R ^{6a}
N164	R ^{1b}	R ^{3j}	R ^{4e}	R ^{5am}	R ^{6b}
N165	R ^{1b}	R ^{3k}	R ^{4e}	R ^{5an}	R ^{6a}
N166	R ^{1b}	R ^{3k}	R ^{4e}	R ^{5an}	R ^{6b}
N167	R ^{1b}	R ^{3l}	R ^{4e}	R ^{5an}	R ^{6c}
N168	R ^{1b}	R ³ⁱ	R ^{4f}	R ^{5al}	R ^{6a}
N169	R ^{1b}	R ^{3j}	R ^{4f}	R ^{5am}	R ^{6b}
N170	R ^{1b}	R ^{3k}	R ^{4f}	R ^{5an}	R ^{6a}
N171	R ^{1b}	R ^{3k}	R ^{4f}	R ^{5an}	R ^{6b}
N172	R ^{1b}	R ^{3l}	R ^{4f}	R ^{5an}	R ^{6c}
N173	R ^{1b}	R ^{3m}	R ^{4c}	R ^{5ff}	R ^{6a}
N174	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5gg}	R ^{6b}
N175	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5gg}	R ^{6c}
N176	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5ff}	R ^{6b}
N177	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5gg}	R ^{6b}
N178	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5ff}	R ^{6b}

TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N179	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5gg}	R ^{6b}
N180	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5ff}	R ^{6b}
N181	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5gg}	R ^{6b}
N182	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5hh}	R ^{6a}
N183	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5ij}	R ^{6b}
N184	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5ij}	R ^{6c}
N185	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5hh}	R ^{6b}
N186	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5ij}	R ^{6b}
N187	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5hh}	R ^{6b}
N188	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5ij}	R ^{6b}
N189	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5hh}	R ^{6b}
N190	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5ij}	R ^{6b}
N191	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5kk}	R ^{6a}
N192	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5ll}	R ^{6b}
N193	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5ll}	R ^{6c}
N194	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5kk}	R ^{6b}
N195	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5ll}	R ^{6b}
N196	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5kk}	R ^{6b}
N197	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5ll}	R ^{6b}
N198	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5kk}	R ^{6b}
N199	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5ll}	R ^{6b}
N200	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5mm}	R ^{6a}
N201	R ^{1b}	R ^{3o}	R ^{4c}	R ⁵ⁿⁿ	R ^{6b}
N202	R ^{1b}	R ^{3o}	R ^{4c}	R ⁵ⁿⁿ	R ^{6c}
N203	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5mm}	R ^{6b}
N204	R ^{1b}	R ^{3p}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N205	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5mm}	R ^{6b}
N206	R ^{1b}	R ^{3q}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N207	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5mm}	R ^{6b}
N208	R ^{1b}	R ^{3r}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N209	R ^{1b}	R ³ⁿ	R ^{4c}	R ⁵ⁿⁿ	R ^{6a}
N210	R ^{1b}	R ^{3o}	R ^{4c}	R ⁵ⁿⁿ	R ^{6b}
N211	R ^{1b}	R ^{3o}	R ^{4c}	R ⁵ⁿⁿ	R ^{6c}
N212	R ^{1b}	R ^{3p}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N213	R ^{1b}	R ^{3p}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N214	R ^{1b}	R ^{3q}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N215	R ^{1b}	R ^{3q}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N216	R ^{1b}	R ^{3r}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N217	R ^{1b}	R ^{3r}	R ^{4e}	R ⁵ⁿⁿ	R ^{6b}
N218	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5oo}	R ^{6a}
N219	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5oo}	R ^{6b}
N220	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5oo}	R ^{6c}
N221	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5oo}	R ^{6b}
N222	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5oo}	R ^{6b}
N223	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5oo}	R ^{6b}
N224	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5oo}	R ^{6b}
N225	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5oo}	R ^{6b}
N226	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5oo}	R ^{6b}
N227	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5pp}	R ^{6a}
N228	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5qq}	R ^{6b}
N229	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5qq}	R ^{6c}
N230	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5qq}	R ^{6b}
N231	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5qq}	R ^{6b}
N232	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5qq}	R ^{6b}
N233	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5qq}	R ^{6b}
N234	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5qq}	R ^{6b}
N235	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5qq}	R ^{6b}
N236	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5pp}	R ^{6a}
N237	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5qq}	R ^{6b}
N238	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5qq}	R ^{6c}
N239	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5qq}	R ^{6b}
N240	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5qq}	R ^{6b}
N241	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5qq}	R ^{6b}
N242	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5qq}	R ^{6b}
N243	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5qq}	R ^{6b}
N244	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5qq}	R ^{6b}
N245	R ^{1b}	R ³ⁿ	R ^{4c}	R ^{5rr}	R ^{6a}
N246	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5rr}	R ^{6b}
N247	R ^{1b}	R ^{3o}	R ^{4c}	R ^{5rr}	R ^{6c}
N248	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5rr}	R ^{6b}
N249	R ^{1b}	R ^{3p}	R ^{4e}	R ^{5rr}	R ^{6b}
N250	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5rr}	R ^{6b}
N251	R ^{1b}	R ^{3q}	R ^{4e}	R ^{5rr}	R ^{6b}
N252	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5rr}	R ^{6b}
N253	R ^{1b}	R ^{3r}	R ^{4e}	R ^{5rr}	R ^{6b}
N254	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ss}	R ^{6b}
N255	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ss}	R ^{6b}
N256	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ss}	R ^{6b}

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TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N257	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ss}	R ^{6b}
N258	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5st}	R ^{6b}
N259	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5st}	R ^{6b}
N260	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5st}	R ^{6b}
N261	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5st}	R ^{6b}
N262	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5uu}	R ^{6b}
N263	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5uu}	R ^{6b}
N264	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5uu}	R ^{6b}
N265	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5uu}	R ^{6b}
N266	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5vv}	R ^{6b}
N267	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5vv}	R ^{6b}
N268	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5vv}	R ^{6b}
N269	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5vv}	R ^{6b}
N270	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5wv}	R ^{6b}
N271	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5wv}	R ^{6b}
N272	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5wv}	R ^{6b}
N273	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5wv}	R ^{6b}
N274	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5xx}	R ^{6b}
N275	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5xx}	R ^{6b}
N276	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5xx}	R ^{6b}
N277	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5xx}	R ^{6b}
N278	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5zz}	R ^{6b}
N279	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5zz}	R ^{6b}
N280	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5zz}	R ^{6b}
N281	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5zz}	R ^{6b}
N282	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ba}	R ^{6b}
N283	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ba}	R ^{6b}
N284	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ba}	R ^{6b}
N285	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ba}	R ^{6b}
N286	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bc}	R ^{6b}
N287	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bc}	R ^{6b}
N288	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bc}	R ^{6b}
N289	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bc}	R ^{6b}
N290	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bd}	R ^{6b}
N291	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bd}	R ^{6b}
N292	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bd}	R ^{6b}
N293	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bd}	R ^{6b}
N294	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5be}	R ^{6b}
N295	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5be}	R ^{6b}
N296	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5be}	R ^{6b}
N297	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5be}	R ^{6b}
N298	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bf}	R ^{6b}
N299	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bf}	R ^{6b}
N300	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bf}	R ^{6b}
N301	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bf}	R ^{6b}
N302	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bg}	R ^{6b}
N303	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bg}	R ^{6b}
N304	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bg}	R ^{6b}
N305	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bg}	R ^{6b}
N306	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bh}	R ^{6b}
N307	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bh}	R ^{6b}
N308	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bh}	R ^{6b}
N309	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bh}	R ^{6b}
N310	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bi}	R ^{6b}
N311	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bi}	R ^{6b}
N312	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bi}	R ^{6b}
N313	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bi}	R ^{6b}
N314	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bj}	R ^{6b}
N315	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bj}	R ^{6b}
N316	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bj}	R ^{6b}
N317	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bj}	R ^{6b}
N318	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bk}	R ^{6b}
N319	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bk}	R ^{6b}
N320	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bk}	R ^{6b}
N321	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bk}	R ^{6b}
N322	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bl}	R ^{6b}
N323	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bl}	R ^{6b}
N324	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bl}	R ^{6b}
N325	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bl}	R ^{6b}
N326	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bm}	R ^{6b}
N327	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bm}	R ^{6b}
N328	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bm}	R ^{6b}
N329	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bm}	R ^{6b}
N330	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bn}	R ^{6b}
N331	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bn}	R ^{6b}
N332	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bn}	R ^{6b}
N333	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bn}	R ^{6b}
N334	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bo}	R ^{6b}

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TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N335	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bo}	R ^{6b}
N336	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bo}	R ^{6b}
N337	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bo}	R ^{6b}
N338	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bp}	R ^{6b}
N339	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bp}	R ^{6b}
N340	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bp}	R ^{6b}
N341	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bp}	R ^{6b}
N342	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bq}	R ^{6b}
N343	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bq}	R ^{6b}
N344	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bq}	R ^{6b}
N345	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bq}	R ^{6b}
N346	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5br}	R ^{6b}
N347	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5br}	R ^{6b}
N348	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bq}	R ^{6b}
N349	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bq}	R ^{6b}
N350	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bs}	R ^{6b}
N351	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bs}	R ^{6b}
N352	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bs}	R ^{6b}
N353	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bs}	R ^{6b}
N354	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bt}	R ^{6b}
N355	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bt}	R ^{6b}
N356	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bt}	R ^{6b}
N357	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bt}	R ^{6b}
N358	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bu}	R ^{6b}
N359	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bu}	R ^{6b}
N360	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bu}	R ^{6b}
N361	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bu}	R ^{6b}
N362	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bv}	R ^{6b}
N363	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bv}	R ^{6b}
N364	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bv}	R ^{6b}
N365	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bv}	R ^{6b}
N366	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bw}	R ^{6b}
N367	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bw}	R ^{6b}
N368	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bw}	R ^{6b}
N369	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bw}	R ^{6b}
N370	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bx}	R ^{6b}
N371	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bx}	R ^{6b}
N372	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bx}	R ^{6b}
N373	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bx}	R ^{6b}
N374	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5by}	R ^{6b}
N375	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5by}	R ^{6b}
N376	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5by}	R ^{6b}
N377	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5by}	R ^{6b}
N378	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5bz}	R ^{6b}
N379	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5bz}	R ^{6b}
N380	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5bz}	R ^{6b}
N381	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5bz}	R ^{6b}
N382	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ca}	R ^{6b}
N383	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ca}	R ^{6b}
N384	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ca}	R ^{6b}
N385	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ca}	R ^{6b}
N386	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5cb}	R ^{6b}
N387	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5cb}	R ^{6b}
N388	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5cb}	R ^{6b}
N389	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5cb}	R ^{6b}
N390	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5cd}	R ^{6b}
N391	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5cd}	R ^{6b}
N392	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5cd}	R ^{6b}
N393	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5cd}	R ^{6b}
N394	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ce}	R ^{6b}
N395	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ce}	R ^{6b}
N396	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ce}	R ^{6b}
N397	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ce}	R ^{6b}
N398	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5cf}	R ^{6b}
N399	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5cf}	R ^{6b}
N400	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5cf}	R ^{6b}
N401	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5cf}	R ^{6b}
N402	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5cg}	R ^{6b}
N403	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5cg}	R ^{6b}
N404	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5cg}	R ^{6b}
N405	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5cg}	R ^{6b}
N406	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ch}	R ^{6b}
N407	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ch}	R ^{6b}
N408	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ch}	R ^{6b}
N409	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ch}	R ^{6b}
N410	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ci}	R ^{6b}
N411	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ci}	R ^{6b}
N412	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ci}	R ^{6b}

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TABLE N-continued

	R_1	R_3	R_4	R_5	R_6
N413	R^{1b}	R^{3h}	R^{4e}	R^{5ci}	R^{6b}
N414	R^{1b}	R^{3s}	R^{4a}	R^{5cj}	R^{6b}
N415	R^{1b}	R^{3r}	R^{4b}	R^{5ej}	R^{6b}
N416	R^{1b}	R^{3g}	R^{4e}	R^{5ej}	R^{6b}
N417	R^{1b}	R^{3h}	R^{4e}	R^{5ej}	R^{6b}
N418	R^{1b}	R^{3s}	R^{4a}	R^{5ek}	R^{6b}
N419	R^{1b}	R^{3r}	R^{4b}	R^{5ek}	R^{6b}
N420	R^{1b}	R^{3g}	R^{4e}	R^{5ek}	R^{6b}
N421	R^{1b}	R^{3h}	R^{4e}	R^{5ek}	R^{6b}
N422	R^{1b}	R^{3s}	R^{4a}	R^{5el}	R^{6b}
N423	R^{1b}	R^{3r}	R^{4b}	R^{5el}	R^{6b}
N424	R^{1b}	R^{3g}	R^{4e}	R^{5el}	R^{6b}
N425	R^{1b}	R^{3h}	R^{4e}	R^{5el}	R^{6b}
N426	R^{1b}	R^{3s}	R^{4a}	R^{5em}	R^{6b}
N427	R^{1b}	R^{3r}	R^{4b}	R^{5em}	R^{6b}
N428	R^{1b}	R^{3g}	R^{4e}	R^{5em}	R^{6b}
N429	R^{1b}	R^{3h}	R^{4e}	R^{5em}	R^{6b}
N430	R^{1b}	R^{3s}	R^{4a}	R^{5en}	R^{6b}
N431	R^{1b}	R^{3r}	R^{4b}	R^{5en}	R^{6b}
N432	R^{1b}	R^{3g}	R^{4e}	R^{5en}	R^{6b}
N433	R^{1b}	R^{3h}	R^{4e}	R^{5en}	R^{6b}
N434	R^{1b}	R^{3s}	R^{4a}	R^{5eo}	R^{6b}
N435	R^{1b}	R^{3r}	R^{4b}	R^{5eo}	R^{6b}
N436	R^{1b}	R^{3g}	R^{4e}	R^{5eo}	R^{6b}
N437	R^{1b}	R^{3h}	R^{4e}	R^{5eo}	R^{6b}
N438	R^{1b}	R^{3s}	R^{4a}	R^{5ep}	R^{6b}
N439	R^{1b}	R^{3r}	R^{4b}	R^{5ep}	R^{6b}
N440	R^{1b}	R^{3g}	R^{4e}	R^{5ep}	R^{6b}
N441	R^{1b}	R^{3h}	R^{4e}	R^{5ep}	R^{6b}
N442	R^{1b}	R^{3s}	R^{4a}	R^{5eq}	R^{6b}
N443	R^{1b}	R^{3r}	R^{4b}	R^{5eq}	R^{6b}
N444	R^{1b}	R^{3g}	R^{4e}	R^{5eq}	R^{6b}
N445	R^{1b}	R^{3h}	R^{4e}	R^{5eq}	R^{6b}
N446	R^{1b}	R^{3s}	R^{4a}	R^{5er}	R^{6b}
N447	R^{1b}	R^{3r}	R^{4b}	R^{5er}	R^{6b}
N448	R^{1b}	R^{3g}	R^{4e}	R^{5er}	R^{6b}
N449	R^{1b}	R^{3h}	R^{4e}	R^{5er}	R^{6b}
N450	R^{1b}	R^{3s}	R^{4a}	R^{5es}	R^{6b}
N451	R^{1b}	R^{3r}	R^{4b}	R^{5es}	R^{6b}
N452	R^{1b}	R^{3g}	R^{4e}	R^{5es}	R^{6b}
N453	R^{1b}	R^{3h}	R^{4e}	R^{5es}	R^{6b}
N454	R^{1b}	R^{3s}	R^{4a}	R^{5et}	R^{6b}
N455	R^{1b}	R^{3r}	R^{4b}	R^{5et}	R^{6b}
N456	R^{1b}	R^{3g}	R^{4e}	R^{5et}	R^{6b}
N457	R^{1b}	R^{3h}	R^{4e}	R^{5et}	R^{6b}
N458	R^{1b}	R^{3s}	R^{4a}	R^{5eu}	R^{6b}
N459	R^{1b}	R^{3r}	R^{4b}	R^{5eu}	R^{6b}
N460	R^{1b}	R^{3g}	R^{4e}	R^{5eu}	R^{6b}
N461	R^{1b}	R^{3h}	R^{4e}	R^{5eu}	R^{6b}
N462	R^{1b}	R^{3s}	R^{4a}	R^{5ev}	R^{6b}
N463	R^{1b}	R^{3r}	R^{4b}	R^{5ev}	R^{6b}
N464	R^{1b}	R^{3g}	R^{4e}	R^{5ev}	R^{6b}
N465	R^{1b}	R^{3h}	R^{4e}	R^{5ev}	R^{6b}
N466	R^{1b}	R^{3s}	R^{4a}	R^{5ew}	R^{6b}
N467	R^{1b}	R^{3r}	R^{4b}	R^{5ew}	R^{6b}

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TABLE N-continued

	R_1	R_3	R_4	R_5	R_6
N491	R^{1b}	R^{3i}	R^{4b}	R^{5dc}	R^{6b}
N492	R^{1b}	R^{3g}	R^{4e}	R^{5dc}	R^{6b}
N493	R^{1b}	R^{3h}	R^{4e}	R^{5dc}	R^{6b}
N494	R^{1b}	R^{3s}	R^{4a}	R^{5de}	R^{6b}
N495	R^{1b}	R^{3i}	R^{4b}	R^{5de}	R^{6b}
N496	R^{1b}	R^{3g}	R^{4e}	R^{5de}	R^{6b}
N497	R^{1b}	R^{3h}	R^{4e}	R^{5de}	R^{6b}
N498	R^{1b}	R^{3s}	R^{4a}	R^{5df}	R^{6b}
N499	R^{1b}	R^{3i}	R^{4b}	R^{5df}	R^{6b}
N500	R^{1b}	R^{3g}	R^{4e}	R^{5df}	R^{6b}
N501	R^{1b}	R^{3h}	R^{4e}	R^{5df}	R^{6b}
N502	R^{1b}	R^{3s}	R^{4a}	R^{5dg}	R^{6b}
N503	R^{1b}	R^{3i}	R^{4b}	R^{5dg}	R^{6b}
N504	R^{1b}	R^{3g}	R^{4e}	R^{5dg}	R^{6b}
N505	R^{1b}	R^{3h}	R^{4e}	R^{5dg}	R^{6b}
N506	R^{1b}	R^{3s}	R^{4a}	R^{5dh}	R^{6b}
N507	R^{1b}	R^{3i}	R^{4b}	R^{5dh}	R^{6b}
N508	R^{1b}	R^{3g}	R^{4e}	R^{5dh}	R^{6b}
N509	R^{1b}	R^{3h}	R^{4e}	R^{5dh}	R^{6b}
N510	R^{1b}	R^{3s}	R^{4a}	R^{5di}	R^{6b}
N511	R^{1b}	R^{3i}	R^{4b}	R^{5di}	R^{6b}
N512	R^{1b}	R^{3g}	R^{4e}	R^{5di}	R^{6b}
N513	R^{1b}	R^{3h}	R^{4e}	R^{5di}	R^{6b}
N514	R^{1b}	R^{3s}	R^{4a}	R^{5dj}	R^{6b}
N515	R^{1b}	R^{3i}	R^{4b}	R^{5dj}	R^{6b}
N516	R^{1b}	R^{3g}	R^{4e}	R^{5dj}	R^{6b}
N517	R^{1b}	R^{3h}	R^{4e}	R^{5dj}	R^{6b}
N518	R^{1b}	R^{3s}	R^{4a}	R^{5dk}	R^{6b}
N519	R^{1b}	R^{3i}	R^{4b}	R^{5dk}	R^{6b}
N520	R^{1b}	R^{3g}	R^{4e}	R^{5dk}	R^{6b}
N521	R^{1b}	R^{3h}	R^{4e}	R^{5dk}	R^{6b}
N522	R^{1b}	R^{3s}	R^{4a}	R^{5dl}	R^{6b}
N523	R^{1b}	R^{3i}	R^{4b}	R^{5dl}	R^{6b}
N524	R^{1b}	R^{3g}	R^{4e}	R^{5dl}	R^{6b}
N525	R^{1b}	R^{3h}	R^{4e}	R^{5dl}	R^{6b}
N526	R^{1b}	R^{3s}	R^{4a}	R^{5dm}	R^{6b}
N527	R^{1b}	R^{3i}	R^{4b}	R^{5dm}	R^{6b}
N528	R^{1b}	R^{3g}	R^{4e}	R^{5dm}	R^{6b}
N529	R^{1b}	R^{3h}	R^{4e}	R^{5dm}	R^{6b}
N530	R^{1b}	R^{3s}	R^{4a}	R^{5dn}	R^{6b}
N531	R^{1b}	R^{3i}	R^{4b}	R^{5dn}	R^{6b}
N532	R^{1b}	R^{3g}	R^{4e}	R^{5dn}	R^{6b}
N533	R^{1b}	R^{3h}	R^{4e}	R^{5dn}	R^{6b}
N534	R^{1b}	R^{3s}	R^{4a}	R^{5do}	R^{6b}
N535	R^{1b}	R^{3i}	R^{4b}	R^{5do}	R^{6b}
N536	R^{1b}	R^{3g}	R^{4e}	R^{5do}	R^{6b}
N537	R^{1b}	R^{3h}	R^{4e}	R^{5do}	R^{6b}
N538	R^{1b}	R^{3s}	R^{4a}	R^{5dp}	R^{6b}
N539	R^{1b}	R^{3i}	R^{4b}	R^{5dp}	R^{6b}
N540	R^{1b}	R^{3g}	R^{4e}	R^{5dp}	R^{6b}
N541	R^{1b}	R^{3h}	R^{4e}	R^{5dp}	R^{6b}
N542	R^{1b}	R^{3s}	R^{4a}	R^{5dq}	R^{6b}
N543	R^{1b}	R^{3i}	R^{4b}	R^{5dq}	R^{6b}
N544	R^{1b}	R^{3g}	R^{4e}	R^{5dq}	R^{6b}
N545	R^{1b}	R^{3h}	R^{4e}	R^{5dq}	R^{6b}

TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N569	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5dw}	R ^{6b}
N570	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5dx}	R ^{6b}
N571	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5dx}	R ^{6b}
N572	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5dx}	R ^{6b}
N573	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5dx}	R ^{6b}
N574	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ea}	R ^{6b}
N575	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ea}	R ^{6b}
N576	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ea}	R ^{6b}
N577	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ea}	R ^{6b}
N578	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5eb}	R ^{6b}
N579	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5eb}	R ^{6b}
N580	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5eb}	R ^{6b}
N581	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5eb}	R ^{6b}
N582	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ec}	R ^{6b}
N583	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ec}	R ^{6b}
N584	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ec}	R ^{6b}
N585	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ec}	R ^{6b}
N586	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ed}	R ^{6b}
N587	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ed}	R ^{6b}
N588	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ed}	R ^{6b}
N589	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ed}	R ^{6b}
N590	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ef}	R ^{6b}
N591	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ef}	R ^{6b}
N592	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ef}	R ^{6b}
N593	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ef}	R ^{6b}
N594	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5eg}	R ^{6b}
N595	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5eg}	R ^{6b}
N596	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5eg}	R ^{6b}
N597	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5eg}	R ^{6b}
N598	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5eh}	R ^{6b}
N599	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5eh}	R ^{6b}
N600	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5eh}	R ^{6b}
N601	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5eh}	R ^{6b}
N602	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ei}	R ^{6b}
N603	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ei}	R ^{6b}
N604	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ei}	R ^{6b}
N605	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ei}	R ^{6b}
N606	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ej}	R ^{6b}
N607	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ej}	R ^{6b}
N608	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ej}	R ^{6b}
N609	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ej}	R ^{6b}
N610	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ek}	R ^{6b}
N611	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ej}	R ^{6b}
N612	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ej}	R ^{6b}
N613	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ej}	R ^{6b}
N614	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5el}	R ^{6b}
N615	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5el}	R ^{6b}
N616	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5el}	R ^{6b}
N617	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5el}	R ^{6b}
N618	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5em}	R ^{6b}
N619	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5em}	R ^{6b}
N620	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5em}	R ^{6b}
N621	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5em}	R ^{6b}
N622	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5en}	R ^{6b}
N623	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5en}	R ^{6b}
N624	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5en}	R ^{6b}
N625	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5en}	R ^{6b}
N626	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5eo}	R ^{6b}
N627	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5eo}	R ^{6b}
N628	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5eo}	R ^{6b}
N629	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5eo}	R ^{6b}
N630	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ep}	R ^{6b}
N631	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ep}	R ^{6b}
N632	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ep}	R ^{6b}
N633	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ep}	R ^{6b}
N634	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5eq}	R ^{6b}
N635	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5eq}	R ^{6b}
N636	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5eq}	R ^{6b}
N637	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5eq}	R ^{6b}
N638	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5er}	R ^{6b}
N639	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5er}	R ^{6b}
N640	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5er}	R ^{6b}
N641	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5er}	R ^{6b}
N642	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5es}	R ^{6b}
N643	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5es}	R ^{6b}
N644	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5es}	R ^{6b}
N645	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5es}	R ^{6b}
N646	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5et}	R ^{6b}

TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N647	R ^{1b}	R ^{3t}	R ^{4b}	R ^{bet}	R ^{6b}
N648	R ^{1b}	R ^{3g}	R ^{4e}	R ^{bet}	R ^{6b}
N649	R ^{1b}	R ^{3h}	R ^{4e}	R ^{bet}	R ^{6b}
N650	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5eu}	R ^{6b}
N651	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5eu}	R ^{6b}
N652	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5eu}	R ^{6b}
N653	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5eu}	R ^{6b}
N654	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ev}	R ^{6b}
N655	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ev}	R ^{6b}
N656	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ev}	R ^{6b}
N657	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ev}	R ^{6b}
N658	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ex}	R ^{6b}
N659	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ex}	R ^{6b}
N660	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ex}	R ^{6b}
N661	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ex}	R ^{6b}
N662	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ey}	R ^{6b}
N663	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ey}	R ^{6b}
N664	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ey}	R ^{6b}
N665	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ey}	R ^{6b}
N666	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5ez}	R ^{6b}
N667	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5ez}	R ^{6b}
N668	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5ez}	R ^{6b}
N669	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5ez}	R ^{6b}
N670	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fa}	R ^{6b}
N671	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fa}	R ^{6b}
N672	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fa}	R ^{6b}
N673	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fa}	R ^{6b}
N674	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fb}	R ^{6b}
N675	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fb}	R ^{6b}
N676	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fb}	R ^{6b}
N677	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fb}	R ^{6b}
N678	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fc}	R ^{6b}
N679	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fc}	R ^{6b}
N680	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fc}	R ^{6b}
N681	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fc}	R ^{6b}
N682	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fd}	R ^{6b}
N683	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fd}	R ^{6b}
N684	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fd}	R ^{6b}
N685	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fd}	R ^{6b}
N686	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fe}	R ^{6b}
N687	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fe}	R ^{6b}
N688	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fe}	R ^{6b}
N689	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fe}	R ^{6b}
N690	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fg}	R ^{6b}
N691	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fg}	R ^{6b}
N692	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fg}	R ^{6b}
N693	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fg}	R ^{6b}
N694	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fh}	R ^{6b}
N695	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fh}	R ^{6b}
N696	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fh}	R ^{6b}
N697	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fh}	R ^{6b}
N698	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fi}	R ^{6b}
N699	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fi}	R ^{6b}
N700	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fi}	R ^{6b}
N701	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fi}	R ^{6b}
N702	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fj}	R ^{6b}
N703	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fj}	R ^{6b}
N704	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fj}	R ^{6b}
N705	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fj}	R ^{6b}
N706	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fk}	R ^{6b}
N707	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fk}	R ^{6b}
N708	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fk}	R ^{6b}
N709	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fk}	R ^{6b}
N710	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fl}	R ^{6b}
N711	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fl}	R ^{6b}
N712	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fl}	R ^{6b}
N713	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fl}	R ^{6b}
N714	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fm}	R ^{6b}
N715	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fm}	R ^{6b}
N716	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fm}	R ^{6b}
N717	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fm}	R ^{6b}
N718	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fn}	R ^{6b}
N719	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fn}	R ^{6b}
N720	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fn}	R ^{6b}
N721	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fn}	R ^{6b}
N722	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fo}	R ^{6b}
N723	R ^{1b}	R ^{3t}	R ^{4b}	R ^{5fo}	R ^{6b}
N724	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fo}	R ^{6b}

TABLE N-continued

	R ₁	R ₃	R ₄	R ₅	R ₆
N725	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fo}	R ^{6b}
N726	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fp}	R ^{6b}
N727	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fp}	R ^{6b}
N728	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fp}	R ^{6b}
N729	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fp}	R ^{6b}
N730	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fq}	R ^{6b}
N731	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fq}	R ^{6b}
N732	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fq}	R ^{6b}
N733	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fq}	R ^{6b}
N734	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fr}	R ^{6b}
N735	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fr}	R ^{6b}
N736	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fr}	R ^{6b}
N737	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fr}	R ^{6b}
N738	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fs}	R ^{6b}
N739	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fs}	R ^{6b}
N740	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fs}	R ^{6b}
N741	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fs}	R ^{6b}
N742	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fr}	R ^{6b}
N743	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fr}	R ^{6b}
N744	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fr}	R ^{6b}
N745	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fr}	R ^{6b}
N746	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fu}	R ^{6b}
N747	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fu}	R ^{6b}
N748	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fu}	R ^{6b}
N749	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fu}	R ^{6b}
N750	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fv}	R ^{6b}
N751	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fv}	R ^{6b}
N752	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fv}	R ^{6b}
N753	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fv}	R ^{6b}
N754	R ^{1b}	R ^{3s}	R ^{4a}	R ^{5fv}	R ^{6b}
N755	R ^{1b}	R ^{3r}	R ^{4b}	R ^{5fv}	R ^{6b}
N756	R ^{1b}	R ^{3g}	R ^{4e}	R ^{5fv}	R ^{6b}
N757	R ^{1b}	R ^{3h}	R ^{4e}	R ^{5fv}	R ^{6b}

Compounds of formula I as well as intermediates and reagents used can be prepared by the methods herein and as described in WO2008/101682 as well as further methods known to a skilled chemist in a variety of ways, or they are commercially available.

In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Chlorothalonil. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Fludioxonil. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Cyprodinil. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Fenpropidin. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Mandipropamid. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Fluazinam. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Pro-cymedone. In a further preferred embodiment the component

A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Carbendazim. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Abamectin. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Clothianidin. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Emamectin benzoate. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Imidacloprid. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Tefluthrin. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Mefenoxam. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Orocymedone. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Thiamethoxam. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Lambda-cyhalothrin. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Gamma-cyhalothrin. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Profenofos. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Lufenuron. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Diflubenzuron. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Cypermethrin. In a further preferred embodiment the component A is a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Nov-aluron. In a further preferred embodiment the component A is

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[illegible]

pound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Tebuconazole. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Flutriafol. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Iaconazole. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is 1-(2-chlorophenyl)-2-(1-chlorocycloprop-1-yl)-3-(1,2,4-triazol-1-yl)propan-2-ol [CAS number 120983-64-4]. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is prothioconazole. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is (S)-[3-(4-chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol [CAS number 1229606-46-5]. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164 or a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol [CAS number 1229605-96-2]. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Pyrisoxazole. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is 3-(difluoromethyl)-N-methoxy-1-methyl-N-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1H-pyrazole-4-carboxamide [CAS number 1228284-64-7]. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide [CAS number 1072957-71-1]. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Isopyrazam. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Sedaxane. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Boscalid. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Fluxus.

aproxad. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Penthiopyrad. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Penflufen. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Bixafen. In a further preferred embodiment the component A is a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454 and the component B is Fluopyram. In a further embodiment the invention relates to a specific compound selected from Tables 1 to 164, a specific compound selected from P.1 to P.372 or a specific compound selected from Q.001 to Q.454.

The compounds of formula I, and, where appropriate, the tautomers thereof, can be present in the form of one of the isomers which are possible or as a mixture of these, for example in the form of pure isomers, such as antipodes and/or diastereomers, or as isomer mixtures, such as structural isomer, stereo isomer, diastereoisomer and enantiomer mixtures, for example racemates, diastereomer mixtures or racemate mixtures, depending on the number, absolute and relative configuration of asymmetric carbon atoms which occur in the molecule and/or depending on the configuration of non-aromatic double bonds which occur in the molecule; the invention relates to the pure isomers and also to all isomer mixtures which are possible and is to be understood in each case in this sense hereinabove and hereinbelow, even when stereochemical details are not mentioned specifically in each case.

Likewise, where isomers are possible for compounds that may be selected as component B, the invention relates to the pure isomers and also to all isomer mixtures which are possible.

The compositions according to the invention have, for practical purposes, a very advantageous spectrum of activities for protecting useful plants against diseases that are caused by phytopathogenic microorganisms, such as fungi, bacteria or viruses.

The invention relates to a method of controlling or preventing infestation of useful plants by phytopathogenic microorganisms, wherein a composition of the invention is applied to the plants, to parts thereof or the locus thereof. The compositions according to the invention are distinguished by excellent activity at low rates of application, by being well tolerated by plants and by being environmentally safe. They have very useful curative, preventive and systemic properties and are used for protecting numerous useful plants. The compositions of the invention can be used to inhibit or destroy the diseases that occur on plants or parts of plants (fruit, blossoms, leaves, stems, tubers, roots) of different crops of useful plants, while at the same time protecting also those parts of the plants that grow later e.g. from phytopathogenic microorganisms.

It is also possible to use compositions of the invention as dressing agents for the treatment of plant propagation material, in particular of seeds (fruit, tubers, grains) and plant cuttings (e.g. rice), for the protection against fungal infections as well as against phytopathogenic fungi occurring in the soil.

Furthermore the compositions of the invention may be used for controlling fungi in related areas, for example in the

protection of technical materials, including wood and wood related technical products, in food storage or in hygiene management.

The compositions of the invention are, for example, effective against the phytopathogenic fungi of the following classes: Fungi imperfecti (e.g. *Botrytis*, *Pyricularia*, *Helmintosporium*, *Fusarium*, *Septoria*, *Cercospora* and *Alternaria*) and *Basidiomycetes* (e.g. *Rhizoctonia*, *Hemileia*, *Puccinia*). Additionally, they are also effective against the Ascomycetes classes (e.g. *Venturia* and *Erysiphe*, *Podosphaera*, *Monilinia*, *Uncinula*) and of the Oomycetes classes (e.g. *Phytophthora*, *Pythium*, *Plasmopara*). Outstanding activity has been observed against powdery mildew (*Erysiphe* spp.). Furthermore, the compositions of the invention are effective against phytopathogenic bacteria and viruses (e.g. against *Xanthomonas* spp, *Pseudomonas* spp, *Erwinia amylovora* as well as against the tobacco mosaic virus). Good activity has been observed against rust disease, like leaf rust (*Puccinia* spp.) and soybean rust (*Phakopsora pachyrhizi*).

Within the scope of the invention, useful plants to be protected typically comprise the following species of plants: cereal (wheat, barley, rye, oat, rice, maize, sorghum and related species); beet (sugar beet and fodder beet); pomes, drupes and soft fruit (apples, pears, plums, peaches, almonds, cherries, strawberries, raspberries and blackberries); leguminous plants (beans, lentils, peas, soybeans); oil plants (rape, mustard, poppy, olives, sunflowers, coconut, castor oil plants, cocoa beans, groundnuts); cucumber plants (pumpkins, cucumbers, melons); fiber plants (cotton, flax, hemp, jute); citrus fruit (oranges, lemons, grapefruit, mandarins); vegetables (spinach, lettuce, asparagus, cabbages, carrots, onions, tomatoes, potatoes, paprika); lauraceae (avocado, *cinnamomum*, camphor) or plants such as tobacco, nuts, coffee, eggplants, sugar cane, tea, pepper, vines, hops, bananas and natural rubber plants, as well as ornamentals and turf and grass species.

The toxin contained in the transgenic plants imparts to the plants tolerance to harmful insects. Such insects can occur in any taxonomic group of insects, but are especially commonly found in the beetles (Coleoptera), two-winged insects (Diptera) and butterflies (Lepidoptera).

Transgenic plants containing one or more genes that code for an insecticidal resistance and express one or more toxins are known and some of them are commercially available. Examples of such plants are: YieldGard® (maize variety that expresses a Cry1Ab toxin); YieldGard Rootworm® (maize variety that expresses a Cry3Bb1 toxin); YieldGard Plus® (maize variety that expresses a Cry1Ab and a Cry3Bb1 toxin); Starlink® (maize variety that expresses a Cry9 C toxin); Herculex I® (maize variety that expresses a Cry1Fa2 toxin and the enzyme phosphinothricine N-acetyltransferase (PAT) to achieve tolerance to the herbicide glufosinate ammonium); NuCOTN 33B® (cotton variety that expresses a Cry1Ac toxin); Bollgard I® (cotton variety that expresses a Cry1Ac toxin); Bollgard II® (cotton variety that expresses a Cry1Ac and a Cry2Ab toxin); VipCot® (cotton variety that expresses a Vip3A and a Cry1Ab toxin); NewLeaf® (potato variety that expresses a Cry3A toxin); NatureGard®, Agri-sure® GT Advantage (GA21 glyphosate-tolerant trait), Agri-sure® CB Advantage (Bt11 corn borer (CB) trait) and Protecta®.

Further examples of such transgenic crops are:

1. Bt11 Maize from Syngenta Seeds SAS, Chemin de l'Hobit 27, F-31 790 St. Sauveur, France, registration number C/FR/96/05/10. Genetically modified *Zea mays* which have been rendered resistant to attack by the European corn borer

(*Ostrinia nubilalis* and *Sesamia nonagrioides*) by transgenic expression of a truncated Cry1Ab toxin. Bt11 maize also transgenically expresses the enzyme PAT to achieve tolerance to the herbicide glufosinate ammonium.

2. Bt176 Maize from Syngenta Seeds SAS, Chemin de l'Hobit 27, F-31 790 St. Sauveur, France, registration number C/FR/96/05/10. Genetically modified *Zea mays* which have been rendered resistant to attack by the European corn borer (*Ostrinia nubilalis* and *Sesamia nonagrioides*) by transgenic expression of a Cry1Ab toxin. Bt176 maize also transgenically expresses the enzyme PAT to achieve tolerance to the herbicide glufosinate ammonium.

3. MIR604 Maize from Syngenta Seeds SAS, Chemin de l'Hobit 27, F-31 790 St. Sauveur, France, registration number C/FR/96/05/10. Maize which has been rendered insect-resistant by transgenic expression of a modified Cry3A toxin. This toxin is Cry3A055 modified by insertion of a cathepsin-G-protease recognition sequence. The preparation of such transgenic maize plants is described in WO 03/018810.

4. MON 863 Maize from Monsanto Europe S.A. 270-272 Avenue de Tervuren, B-1150 Brussels, Belgium, registration number C/DE/02/9. MON 863 expresses a Cry3Bb1 toxin and has resistance to certain Coleoptera insects.

5. IPC 531 Cotton from Monsanto Europe S.A. 270-272 Avenue de Tervuren, B-1150 Brussels, Belgium, registration number C/ES/96/02.

6. 1507 Maize from Pioneer Overseas Corporation, Avenue Tedesco, 7 B-1160 Brussels, Belgium, registration number C/N L/00/10. Genetically modified maize for the expression of the protein Cry1 F for achieving resistance to certain Lepidoptera insects and of the PAT protein for achieving tolerance to the herbicide glufosinate ammonium.

7. NK603xMON 810 Maize from Monsanto Europe S.A. 270-272 Avenue de Tervuren, B-1150 Brussels, Belgium, registration number C/GB/02/M3/03. Consists of conventionally bred hybrid maize varieties by crossing the genetically modified varieties NK603 and MON 810. NK603xMON 810 Maize transgenically expresses the protein CP4 EPSPS, obtained from *Agrobacterium* sp. strain CP4, which imparts tolerance to the herbicide Roundup® (contains glyphosate), and also a Cry1Ab toxin obtained from *Bacillus thuringiensis* subsp. *kurstaki* which brings about tolerance to certain Lepidoptera, include the European corn borer.

The term "locus" of a useful plant as used herein is intended to embrace the place on which the useful plants are growing, where the plant propagation materials of the useful plants are sown or where the plant propagation materials of the useful plants will be placed into the soil. An example for such a locus is a field, on which crop plants are growing.

The term "plant propagation material" is understood to denote generative parts of the plant, such as seeds, which can be used for the multiplication of the latter, and vegetative material, such as cuttings or tubers, for example potatoes. There may be mentioned for example seeds (in the strict sense), roots, fruits, tubers, bulbs, rhizomes and parts of plants. Germinated plants and young plants which are to be transplanted after germination or after emergence from the soil, may also be mentioned. These young plants may be protected before transplantation by a total or partial treatment by immersion. Preferably "plant propagation material" is understood to denote seeds.

Components A and B can be used in unmodified form or, preferably, together with carriers and adjuvants conventionally employed in the art of formulation.

To this components A and B and inert carriers are conveniently formulated in known manner to emulsifiable concentrates, coatable pastes, directly sprayable or dilutable solu-

tions, dilute emulsions, wettable powders, soluble powders, dusts, granulates, and also encapsulations e.g. in polymeric substances. As with the type of the compositions, the methods of application, such as spraying, atomizing, dusting, scattering, coating or pouring, are chosen in accordance with the intended objectives and the prevailing circumstances. The compositions may also contain further adjuvants such as stabilizers, antifoams, viscosity regulators, binders or tackifiers as well as fertilizers, micronutrient donors or other formulations for obtaining special effects.

Suitable carriers and adjuvants can be solid or liquid and are substances useful in formulation technology, e.g. natural or regenerated mineral substances, solvents, dispersants, wetting agents, tackifiers, thickeners, binders or fertilizers. Such carriers are for example described in WO 97/33890.

The compositions of the invention can be applied to the locus of the plant or plant to be treated, simultaneously or in succession with further compounds. These further compounds can be e.g. fertilizers or micronutrient donors or other preparations which influence the growth of plants. They can also be herbicides as well as insecticides, fungicides, bactericides, nematocides, molluscicides or mixtures of several of these preparations, if desired together with further carriers, surfactants or application promoting adjuvants customarily employed in the art of formulation. Suitable further compounds are described in WO2008/101682.

A preferred method of the invention is foliar application. The frequency of application and the rate of application will depend on the risk of infestation by the corresponding pathogen. However, the compositions of the invention can also penetrate the plant through the roots via the soil (systemic action) by drenching the locus of the plant with a liquid formulation, or by applying the compounds in solid form to the soil, e.g. in granular form (soil application). In crops of water rice such granulates can be applied to the flooded rice field. The compositions of the invention may also be applied to seeds (coating) by impregnating the seeds or tubers either with a liquid formulation of the fungicide or coating them with a solid formulation.

A formulation, i.e. a composition of the invention and, if desired, comprising a solid or liquid adjuvant, is prepared in a known manner, typically by intimately mixing and/or grinding the compound with extenders, for example solvents, solid carriers and, optionally, surface-active compounds (surfactants).

The agrochemical formulations will usually contain from 0.1 to 99% by weight, preferably from 0.1 to 95% by weight, of the active ingredients, 99.9 to 1% by weight, preferably 99.8 to 5% by weight, of a solid or liquid adjuvant, and from 0 to 25% by weight, preferably from 0.1 to 25% by weight, of a surfactant.

Whereas it is preferred to formulate commercial products as concentrates, the end user will normally use dilute formulations.

Advantageous rates of application are normally from 1 g to 2 kg of active ingredient (a.i.) per hectare (ha), preferably from 10 g to 1 kg a.i./ha, most preferably from 20 g to 600 g a.i./ha. When used as seed drenching agent, convenient rates of application are from 10 mg to 1 g of active substance per kg of seeds. The rate of application for the desired action can be determined by experiments. It depends for example on the type of action, the developmental stage of the useful plant, and on the application (location, timing, application method) and can, owing to these parameters, vary within wide limits.

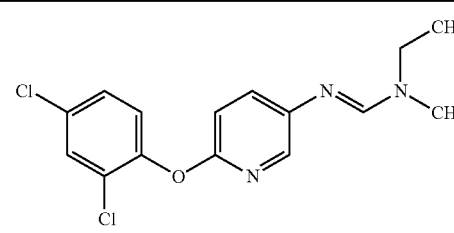
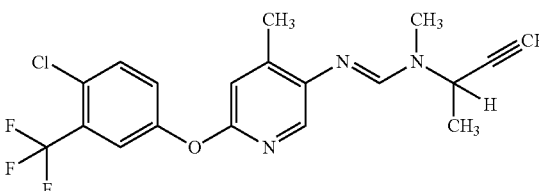
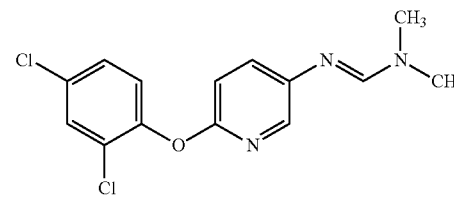
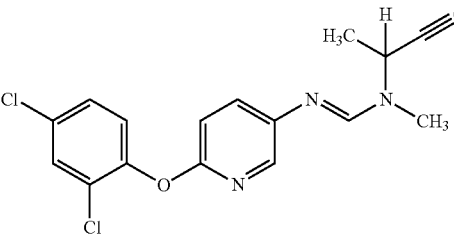
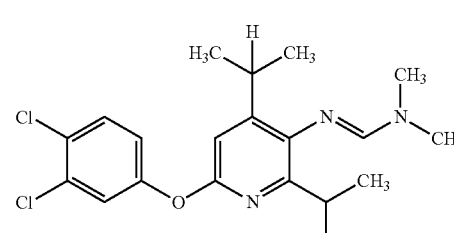
Said methods are particularly effective against the phytopathogenic organisms of the kingdom Fungi, phylum Basidiomycot, class Uredinomycetes, subclass Urediniomycetidae

and the order Uredinales (commonly referred to as rusts). Species of rusts having a particularly large impact on agriculture include those of the family Phakopsoraceae, particularly those of the genus *Phakopsora*, for example *Phakopsora pachyrhizi*, which is also referred to as Asian soybean rust, and those of the family Pucciniaceae, particularly those of the genus *Puccinia* such as *Puccinia graminis*, also known as stem rust or black rust, which is a problem disease in cereal crops and *Puccinia recondita*, also known as brown rust.

The compositions of the invention are effective against various microbial species able to cause a microbial infection in an animal. Examples of such microbial species are those causing Aspergillosis such as *Aspergillus fumigatus*, *A. flavus*, *A. terreus*, *A. nidulans* and *A. niger*, those causing Blastomycosis such as *Blastomyces dermatitidis*; those causing

Candidiasis such as *Candida albicans*, *C. glabrata*, *C. tropicalis*, *C. parapsilosis*, *C. krusei* and *C. lusitanae*; those causing Coccidioidomycosis such as *Coccidioides immitis*; those causing Cryptococcosis such as *Cryptococcus neoformans*; those causing Histoplasmosis such as *Histoplasma capsulatum* and those causing Zygomycosis such as *Absidia corymbifera*, *Rhizomucor pusillus* and *Rhizopus arrhizus*. Further examples are *Fusarium* Spp such as *Fusarium oxysporum* and *Fusarium solani* and *Scedosporium* Spp such as *Scedosporium apiospermum* and *Scedosporium prolificans*. Still further examples are *Microsporium* Spp, *Trichophyton* Spp, *Epidermophyton* Spp, *Mucor* Spp, *Sporothrix* Spp, *Phialophora* Spp, *Cladosporium* Spp, *Petriellidium* spp, *Paracoccidioides* Spp and *Histoplasma* Spp.

The following table provides a selection of compounds of the invention

Cpd No.	Structure
P.01	
P.02	
P.03	
P.04	
P.05	

-continued

Cpd No.	Structure
P.06	 <chem>CN(C)/C=N/c1cc(C)nc(Oc2ccc(Cl)c(C(F)(F)F)c2)c1</chem>
P.07	 <chem>CCN(C)/C=N/c1cc(C)nc(Oc2ccc(Cl)c(C(F)(F)F)c2)c1</chem>
P.08	 <chem>CCN/C=N/c1cc(C)nc(Oc2ccc(Cl)c(C(F)(F)F)c2)c1</chem>
P.09	 <chem>CN(C)/C=N/c1cc(C)nc(Oc2ccc(Cl)c(C(F)(F)F)c2)c1</chem>
P.10	 <chem>CC(C)C#C/C=N/c1cc(C)nc(Oc2ccc(Cl)c(C(F)(F)F)c2)c1</chem>
P.11	 <chem>CCN(C)/C=N/c1cc(C)nc(Oc2ccc(Cl)c(C(F)(F)F)c2)c1</chem>
P.12	 <chem>CC(C)C#C/C=N/c1c(C)c(C(C)C)nc(Oc2cc(Cl)c(Cl)cc2)c1</chem>

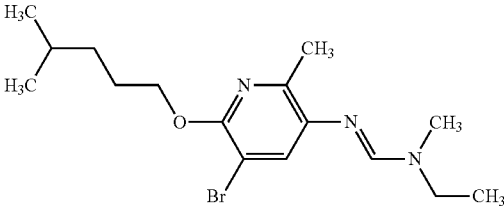
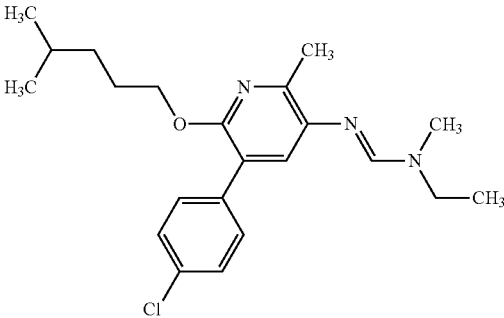
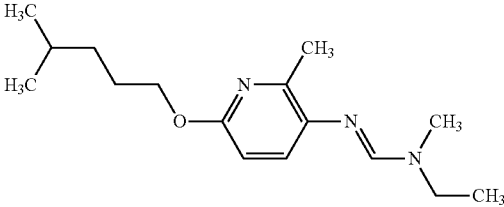
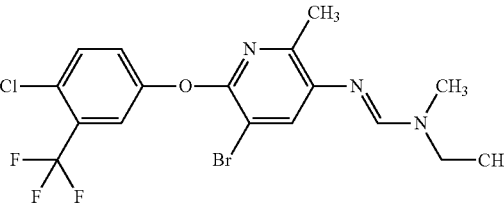
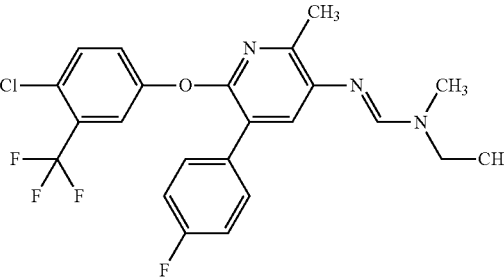
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Cpd No.	Structure
P.13	 <chem>Cc1cc(C=NCC2=CC=CC2)nc1Oc3ccc(Cl)c(C(F)(F)F)c3</chem>
P.14	 <chem>Cc1cc(C=NCC(C)C)nc1Oc2ccc(C(C)(C)C)cc2</chem>
P.15	 <chem>CN(C)C=NC1=CC=C(N1)Oc2cc(Cl)c(C(F)(F)F)cn2</chem>
P.16	 <chem>Cc1cc(C=NCC2=CC=CC2)nc1Oc3ccc(Cl)c(C(F)(F)F)c3</chem>
P.17	 <chem>Cc1cc(C=NCC)nc1Oc2ccc(C(C)(C)C)cc2</chem>
P.18	 <chem>Cc1c(C)cc(C=NCC)nc1C#Nc2ccc(Cl)c(C(F)(F)F)c2</chem>

-continued

Cpd No.	Structure
P.19	 <chem>Cc1cc(C=CN(C)C)cc(Oc2cc(Cl)cc(C(F)(F)F)c2)c1</chem>
P.20	 <chem>CN(C)C=CNc1ccncc1Oc2ccccc2C(F)(F)F</chem>
P.21	 <chem>CN(C)C=CNc1ccncc1Oc2ccc(OC)cc2</chem>
P.22	 <chem>CN(C)C=CNc1ccncc1Oc2cc(Cl)ccc2</chem>
P.23	 <chem>CN(C)C=CNc1ccncc1Oc2cc(F)ccc2</chem>
P.24	 <chem>CN(C)C=CNc1ccncc1Oc2cc(Cl)cc(Cl)c2</chem>
P.25	 <chem>CN(C)C=CNc1ccncc1Oc2ccc(SC)cc2</chem>

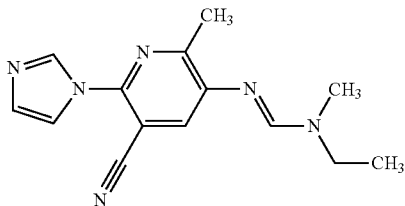
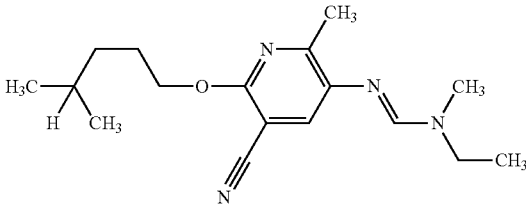
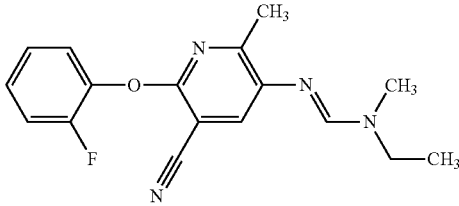
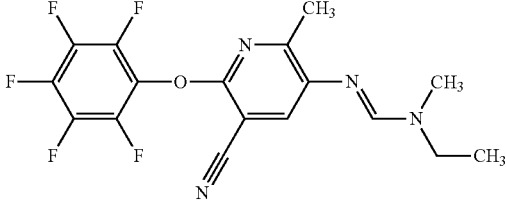
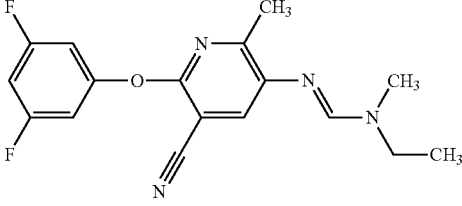
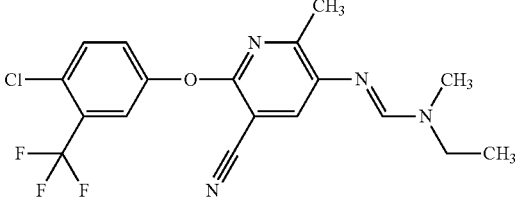
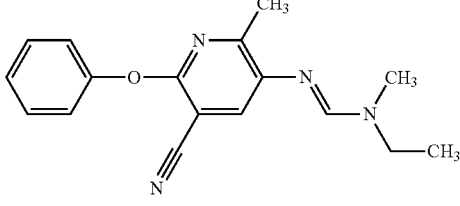
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Cpd No.	Structure
P.26	 <chem>CC(C)CCCOc1nc(C)c(N=CNCC)c(Br)c1</chem>
P.27	 <chem>CC(C)CCCOc1nc(C)c(N=CNCC)c(c1-c2ccc(Cl)cc2)</chem>
P.28	 <chem>CC(C)CCCOc1nc(C)c(N=CNCC)cc1</chem>
P.29	 <chem>CC(C)(F)(F)Fc1ccc(Cl)cc1Oc2nc(C)c(N=CNCC)c(Br)c2</chem>
P.30	 <chem>CC(C)(F)(F)Fc1ccc(Cl)cc1Oc2nc(C)c(N=CNCC)c(c2-c3ccc(F)cc3)</chem>

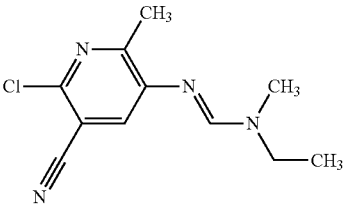
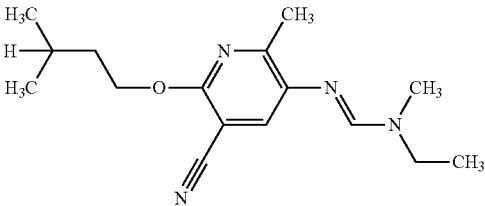
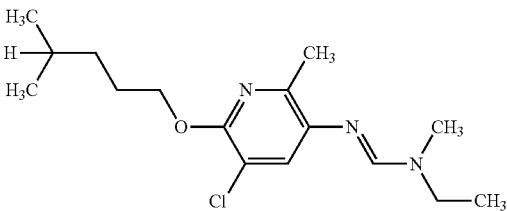
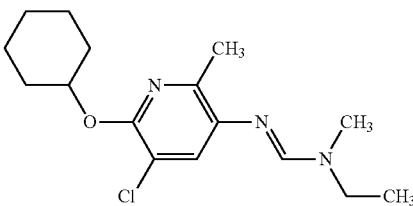
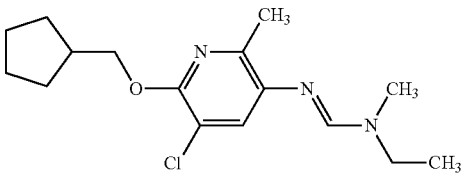
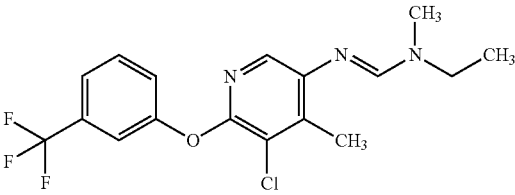
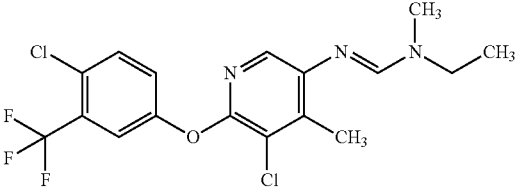
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Cpd No.	Structure
P.31	 <chem>CC1=CC=C(C=C1N)C(=N/CN(C)C)C#CSi(C)(C)C</chem>
P.32	 <chem>CC1=CC=C(C=C1N)C(=N/CN(C)C)C#CSi(C)(C)C</chem>
P.33	 <chem>CC1=CC=C(C=C1N)C(=N/CN(C)C)C#CSi(C)(C)C</chem>
P.34	 <chem>CC1=CC=C(C=C1N)C(=N/CN(C)C)C#CSi(C)(C)C</chem>
P.35	 <chem>CC1=CC=C(C=C1N)C(=N/CN(C)C)C#CSi(C)(C)C</chem>
P.36	 <chem>CC1=CC=C(C=C1N)C(=N/CN(C)C)C#CSi(C)(C)C</chem>

-continued

Cpd No.	Structure
P.37	
P.38	
P.39	
P.40	
P.41	
P.42	
P.43	

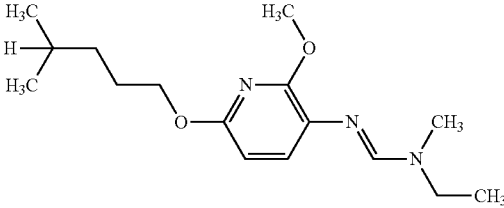
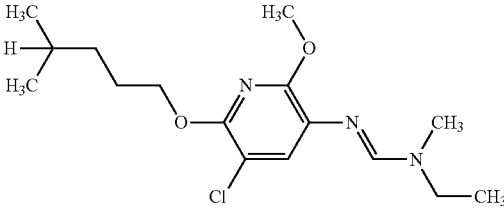
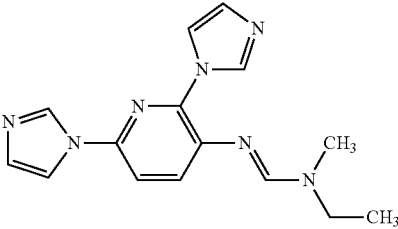
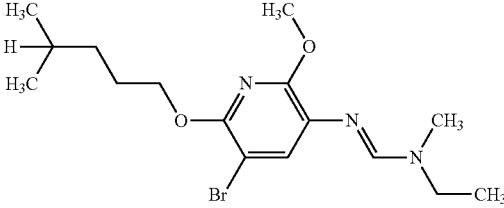
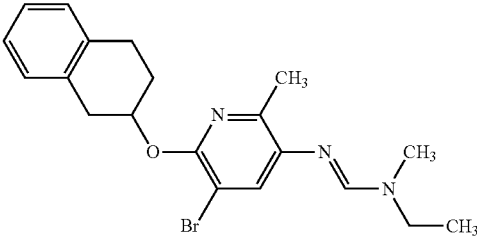
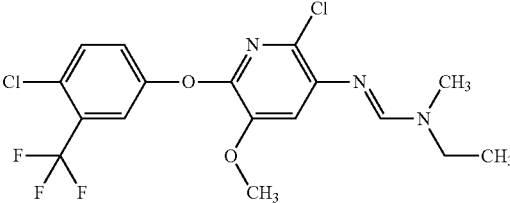
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Cpd No.	Structure
P.44	
P.45	
P.46	
P.47	
P.48	
P.49	
P.50	

-continued

Cpd No.	Structure
P.51	 <chem>CCN(CC)C=CN1C=C(C)N(OC2=CC=C(C(F)(F)F)C=C2)C(=N1)Br</chem>
P.52	 <chem>CCN(CC)C=CN1C=C(C)N(OC2=CC(=CC=C2)C(F)(F)F)C(=N1)Br</chem>
P.53	 <chem>CCN(CC)C=CN1C=C(C)N(OC2=CC(=CC=C2)C(F)(F)F)C(=N1)C</chem>
P.54	 <chem>CCN(CC)C=CN1C=C(C)N(OC2=CC(=CC=C2)C(F)(F)F)C(=N1)[N+](=O)[O-]</chem>
P.55	 <chem>CCN(CC)C(=S)N1C=C(C)N(OC2=CC(=CC=C2)C(F)(F)F)C(=N1)Cl</chem>
P.56	 <chem>CCN(CC)C(=S)N1C=C(C)N(OC2=CC(=CC=C2)C(F)(F)F)C(=N1)Cl</chem>
P.57	 <chem>CCN(CC)C=CN1C=C(C)N(OC2=CC(=CC=C2)C(F)(F)F)C(=N1)C</chem>

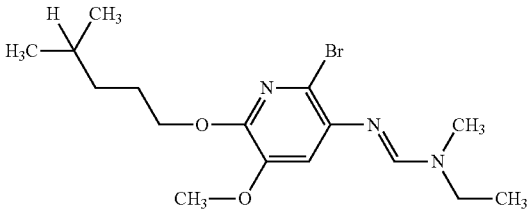
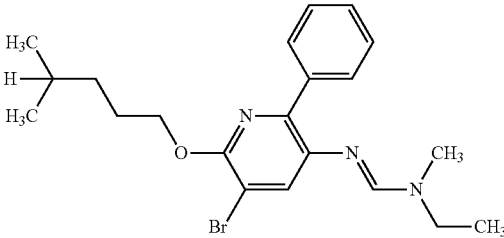
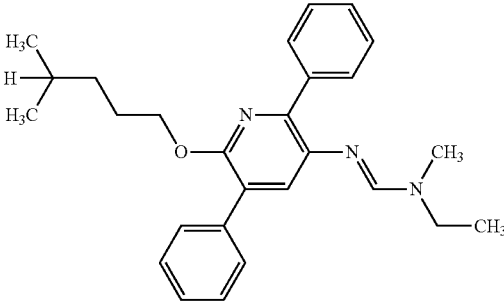
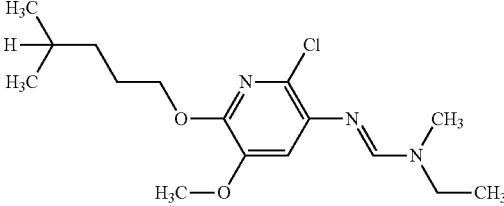
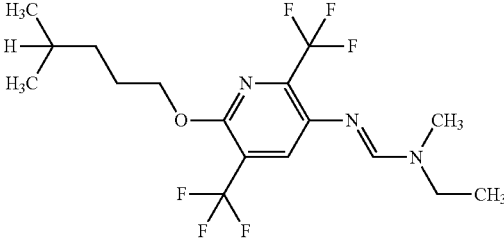
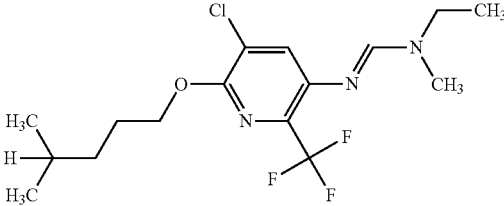
-continued

Cpd No.	Structure
P.58	
P.59	
P.60	
P.61	
P.62	
P.63	

-continued

Cpd No.	Structure
P.64	 <chem>CCCC(C)(C)Oc1nc(Br)c(N=CNC)cc1Cl</chem>
P.65	 <chem>CCCC(C)(C)Oc1nc(c2ccccc2)N=CNC</chem>
P.66	 <chem>CCCC(C)(C)Oc1nc(c2ccccc2)N=CNC</chem> <chem>Clc1ccc(cc1C(F)(F)F)Oc2ccnc(N=CNC)c2</chem>
P.67	 <chem>CCCC(C)(C)Oc1nc(N=CNC)cc(OC)c1</chem>
P.68	 <chem>CCCC(C)(C)Oc1nc(Br)c(N=CNC)cc1OC</chem> <chem>Clc1ccc(cc1C(F)(F)F)Oc2cc(Br)c(N=CNC)cc2OC</chem>
P.69	 <chem>CCCC(C)(C)Oc1nc(Br)c(N=CNC)cc1Br</chem>

-continued

Cpd No.	Structure
P.70	
P.71	
P.72	
P.73	
P.74	
P.75	

-continued

Cpd No.	Structure
P.76	 <chem>CCN(CC)C=Nc1cc(Br)c(oc2c1ccc3ccccc23)c4ccccc4</chem>
P.77	 <chem>CCN(CC)C=Nc1cc(Br)c(oc2ccc3ccccc3c2)c4ccccc4</chem>
P.78	 <chem>CCN(CC)C=Nc1cc(Br)c(oc2ccc3nc(Br)ccc3c2)c4ccccc4</chem>
P.79	 <chem>CCN(CC)C=Nc1cc(Br)c(oc2ccc3nc(Cl)ccc3c2)c4ccccc4</chem>
P.80	 <chem>CCN(CC)C=Nc1cc(Br)c(oc2ccc3nc(C)ccc3c2I)c4ccccc4</chem>
P.81	 <chem>CCN(CC)C=Nc1cc(C#N)c(oc2ccc(C(C)(C)C)cc2)c3cc(Cl)ccn3</chem>

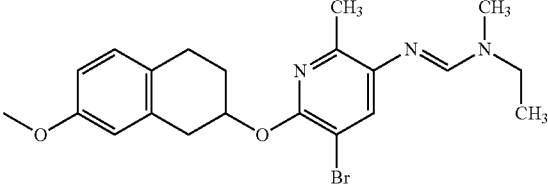
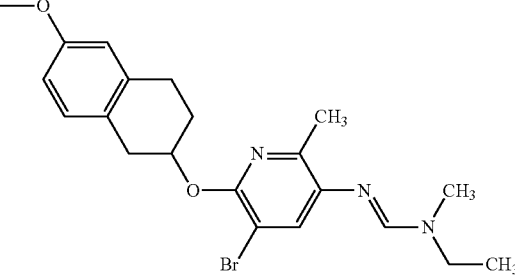
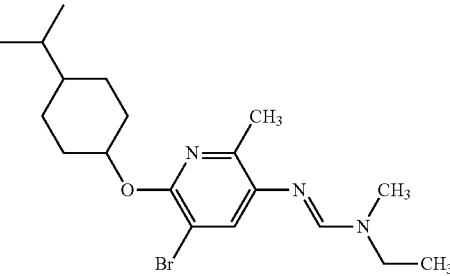
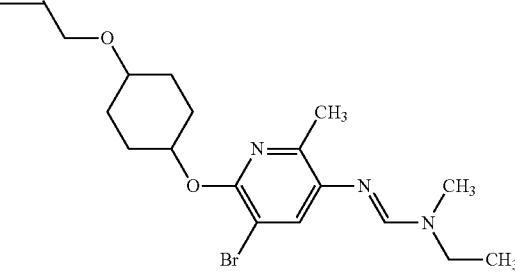
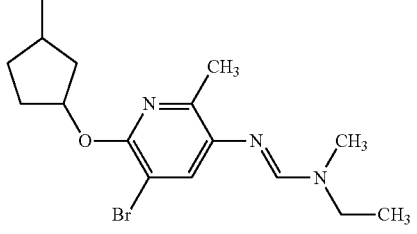
-continued

Cpd No.	Structure
P.82	 <chem>COc1ccc(cc1)CCOC2=CC=C(C(=C2)N)C(=C3C=CC(=C3)N(C)C)Br</chem>
P.83	 <chem>CC1=CC=C2C(=C1)CC(C2)COc3cc(C)cnc3Br/C=C/N(C)C</chem>
P.84	 <chem>CC1=CC=C2C(=C1)CC(C2)COc3cc(C)cnc3Br/C=C/N(C)C</chem>
P.85	 <chem>COc1ccc2cc(C)ccc2c1COc3cc(C)cnc3Br/C=C/N(C)C</chem>
P.86	 <chem>BrC1=CC=C2C(=C1)CC(C2)COc3cc(C)cnc3Br/C=C/N(C)C</chem>

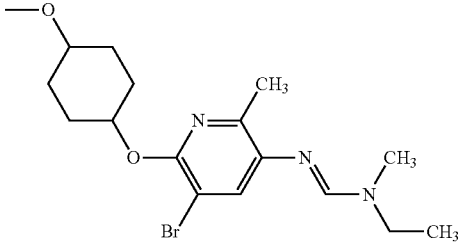
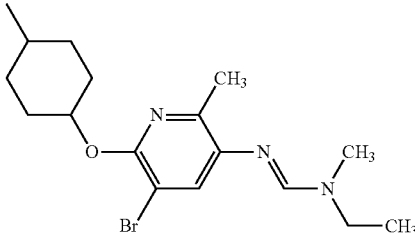
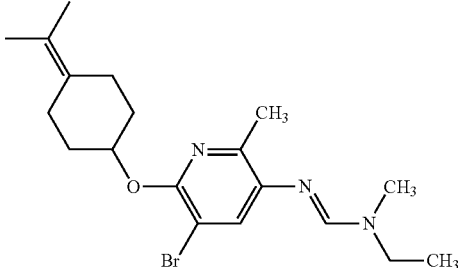
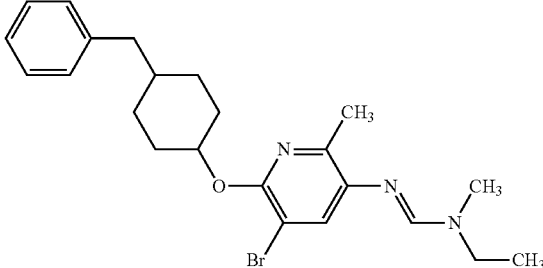
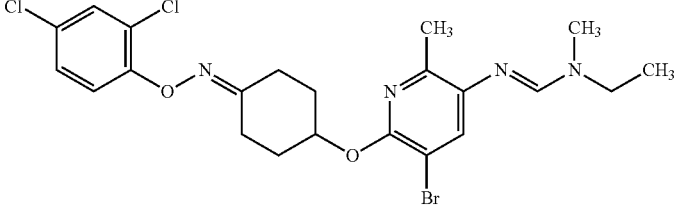
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Cpd No.	Structure
P.87	
P.88	
P.89	
P.90	
P.91	
P.92	

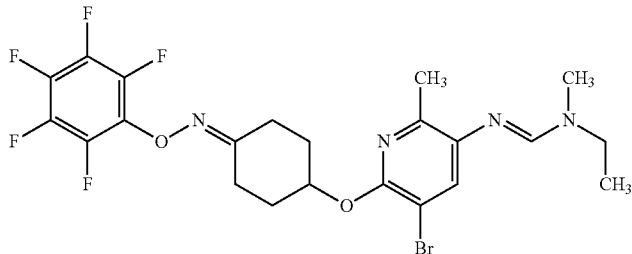
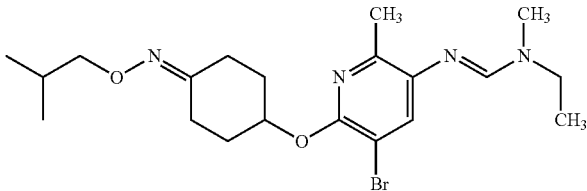
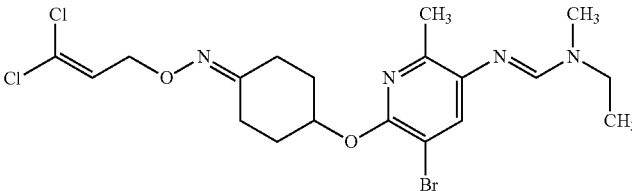
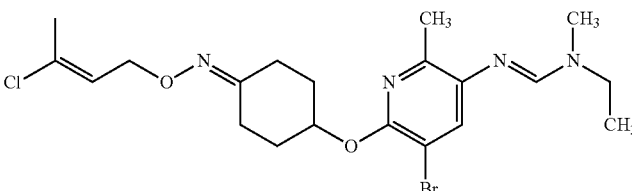
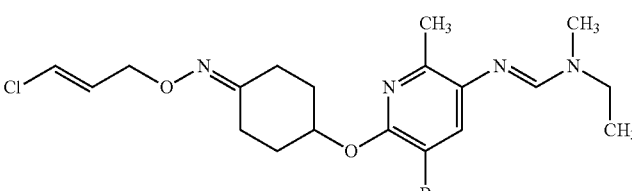
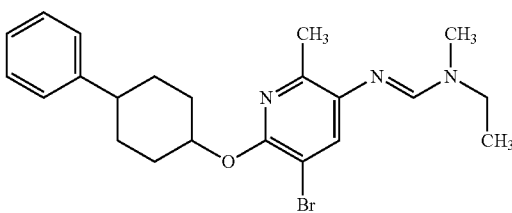
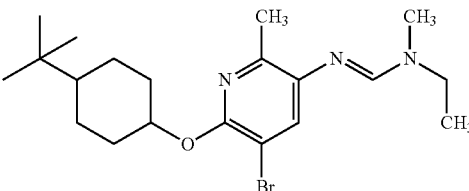
-continued

Cpd No.	Structure
P.93	
P.94	
P.95	
P.96	
P.97	

-continued

Cpd No.	Structure
P.98	 <chem>COc1ccccc1Oc2cc(C)c(N=CNCC)c(Br)c2</chem>
P.99	 <chem>CC1CCCCC1Oc2cc(C)c(N=CNCC)c(Br)c2</chem>
P.100	 <chem>CC(C)=C1CCCCC1Oc2cc(C)c(N=CNCC)c(Br)c2</chem>
P.101	 <chem>CC1CCCCC1Cc2ccccc2Oc3cc(C)c(N=CNCC)c(Br)c3</chem>
P.101a	 <chem>Clc1cc(Cl)cc(OC(=N)C2CCCCC2Oc3cc(C)c(N=CNCC)c(Br)c3)c1</chem>

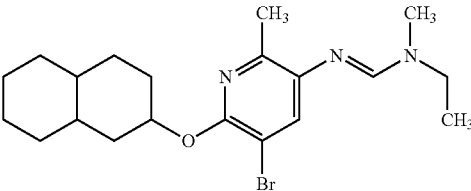
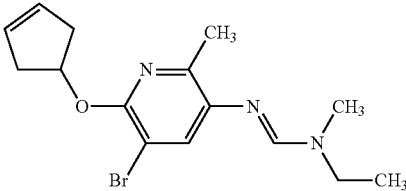
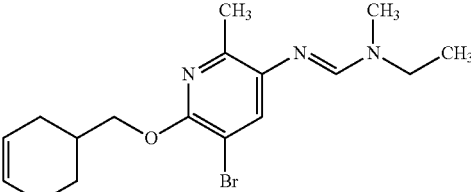
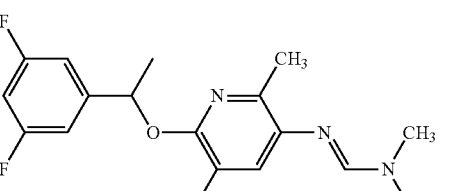
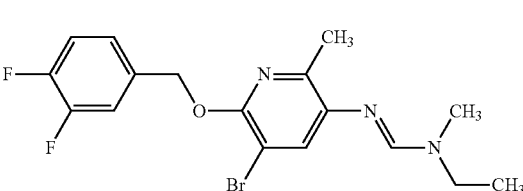
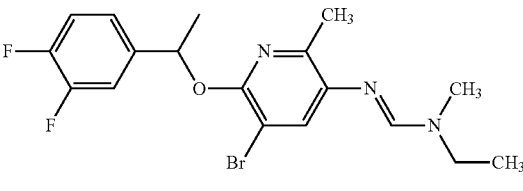
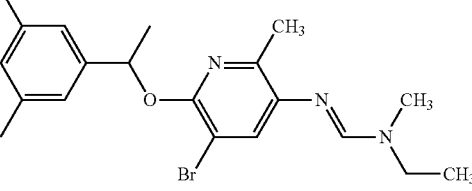
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Cpd No.	Structure
P.102	
P.103	
P.104	
P.105	
P.106	
P.107	
P.108	

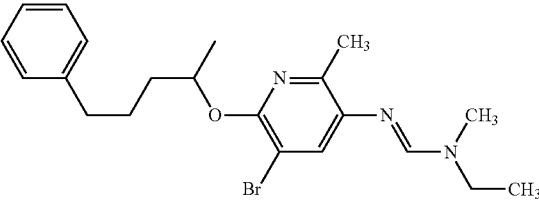
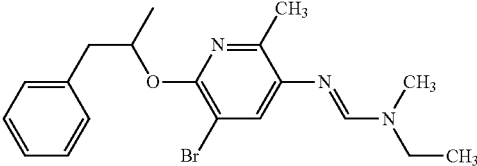
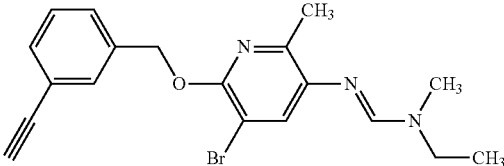
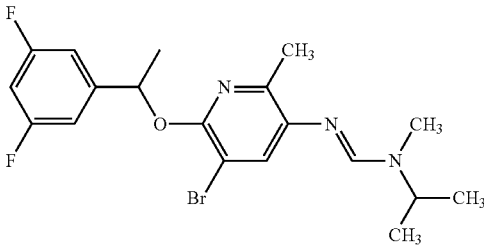
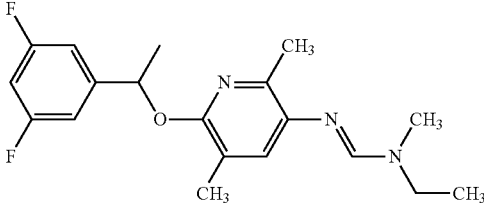
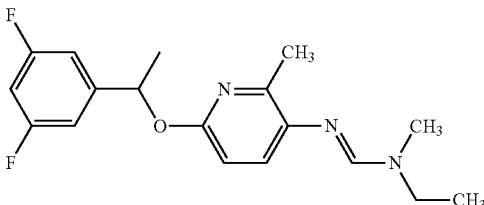
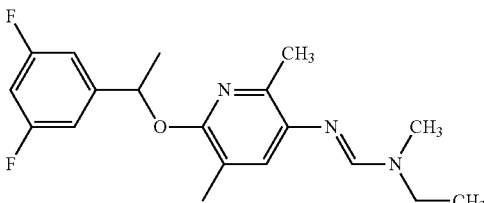
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Cpd No.	Structure
P.109	 <chem>CCN(C)C=Cc1cc(Br)c(OC2CCC(C2)=CCl)c1</chem>
P.110	 <chem>CCN(C)C=Cc1cc(Br)c(OC2C3CCCCC3C2)c1</chem>
P.111	 <chem>CCN(C)C=Cc1cc(Br)c(OC2CCC(C2)C(=O)OCC#C)c1</chem>
P.112	 <chem>CCN(C)C=Cc1cc(Br)c(OC2CCC(C2)C(=O)OCC=C)c1</chem>
P.113	 <chem>CCN(C)C=Cc1cc(Br)c(OC2CCC(C2)C(=O)OCC1=CC=CC=C1)c1</chem>
P.114	 <chem>CCN(C)C=Cc1cc(Br)c(OC2CCC(C2)C(=O)OC)c1</chem>
P.115	 <chem>CCN(C)C=Cc1cc(Br)c(OC2CCC(C2)C#C)c1</chem>

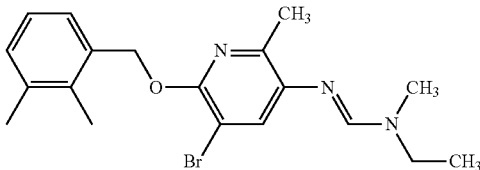
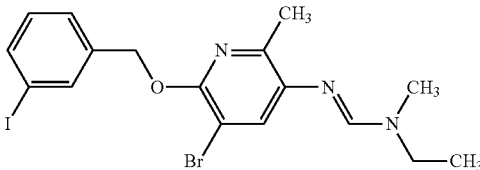
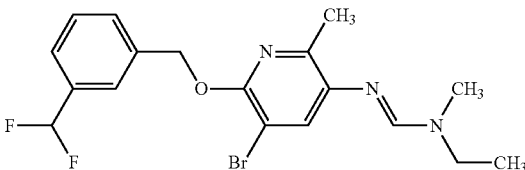
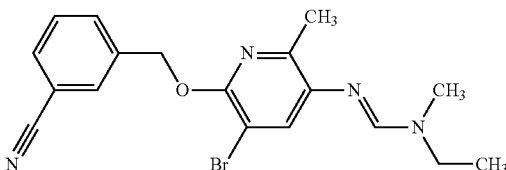
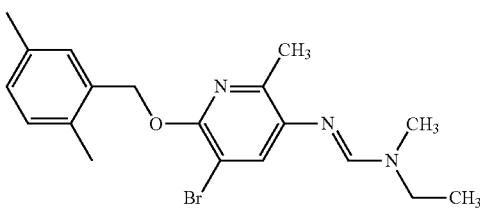
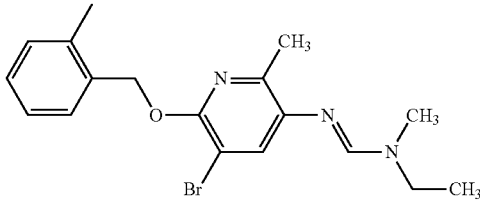
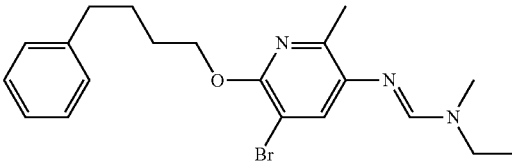
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Cpd No.	Structure
P.116	
P.117	
P.118	
P.119	
P.120	
P.121	
P.122	

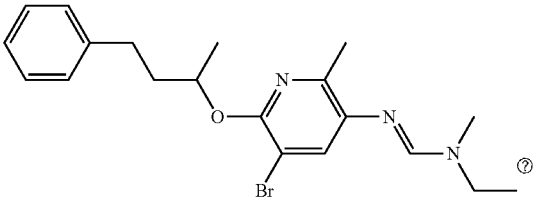
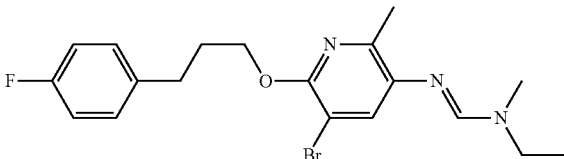
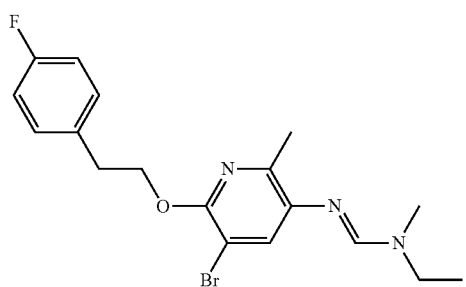
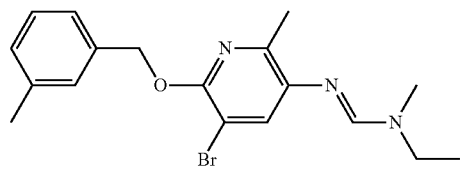
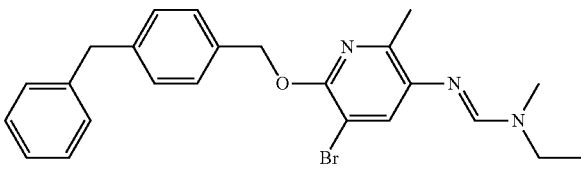
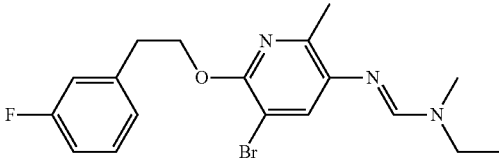
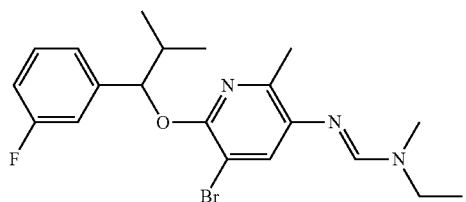
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Cpd No.	Structure
P.123	
P.124	
P.125	
P.126	
P.127	
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P.129	

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Cpd No.	Structure
P.130	
P.131	
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P.133	
P.134	
P.135	
P.136	

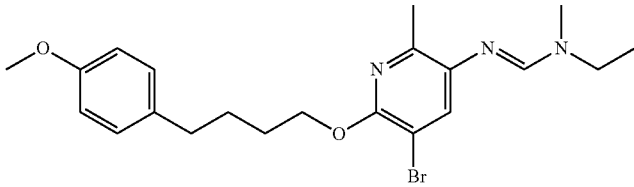
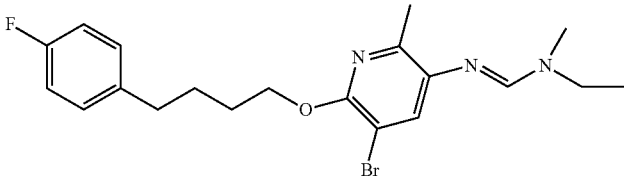
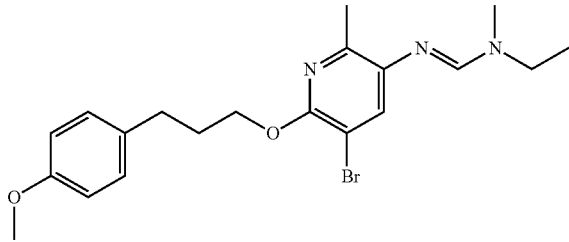
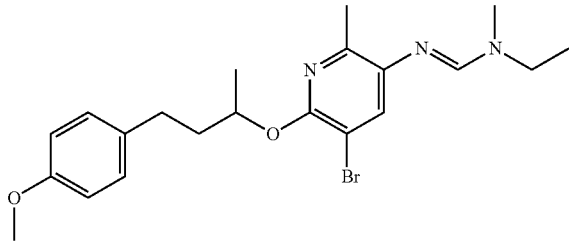
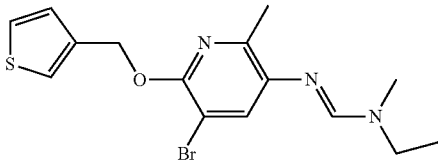
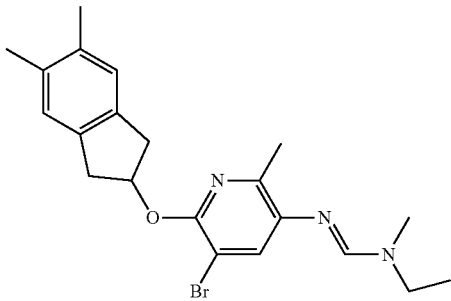
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Cpd No.	Structure
P.137	
P.138	
P.139	
P.140	
P.141	
P.142	
P.143	

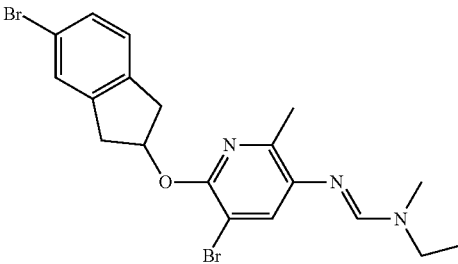
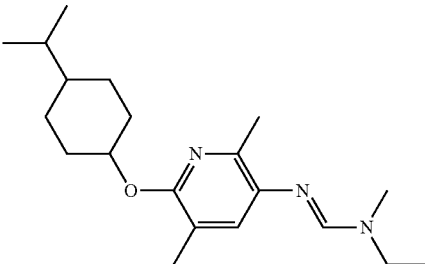
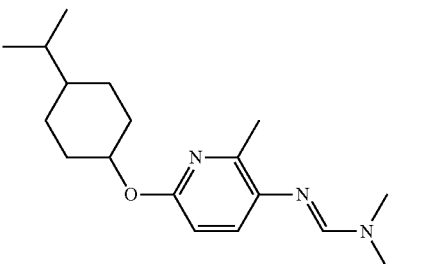
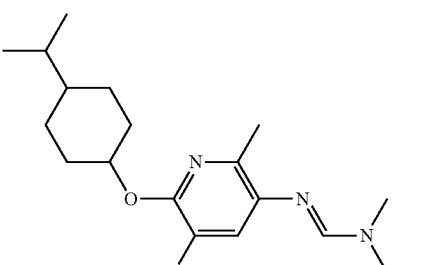
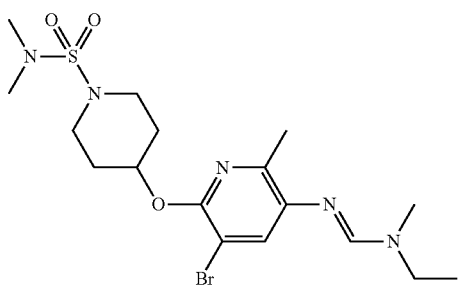
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Cpd No.	Structure
P.145	
P.146	
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P.148	
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P.151	
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Cpd No.	Structure
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P.158	

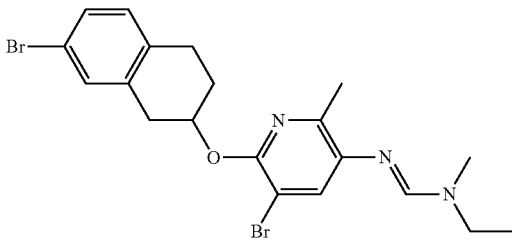
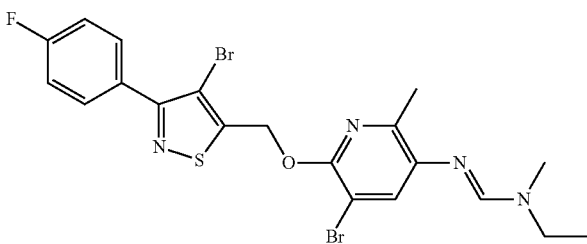
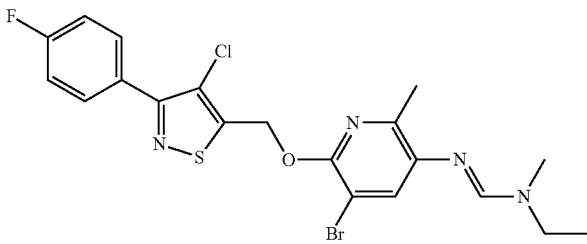
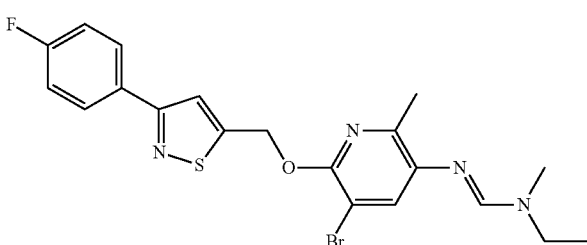
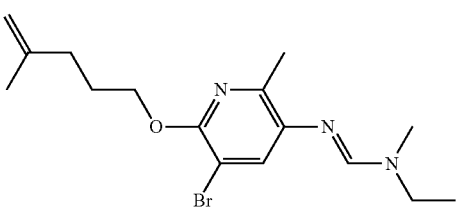
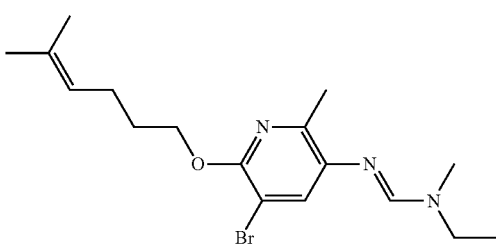
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Cpd No.	Structure
P.159	
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P.161	
P.162	
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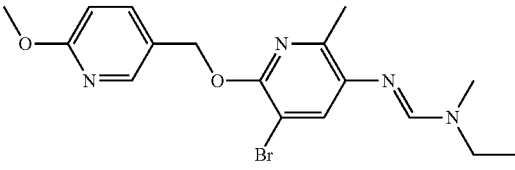
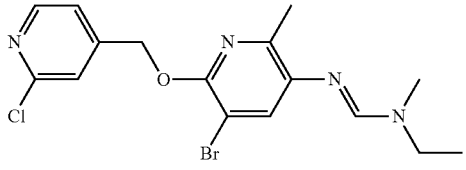
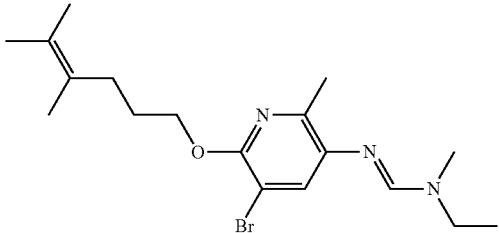
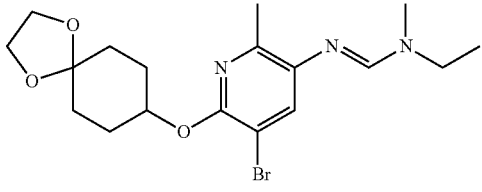
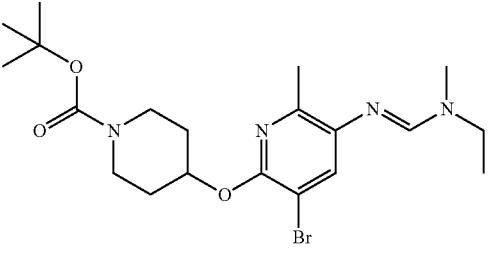
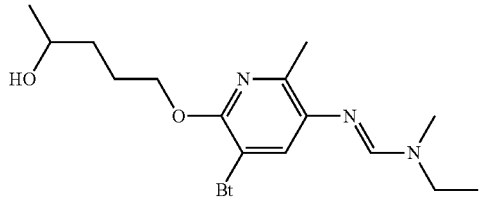
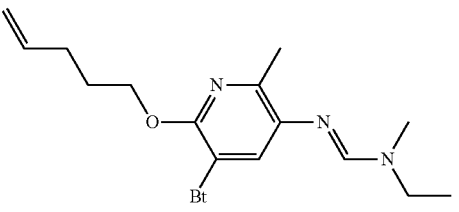
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Cpd No.	Structure
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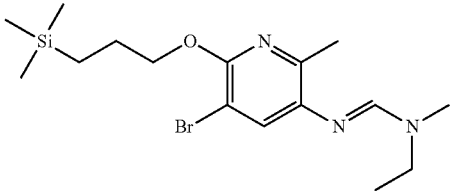
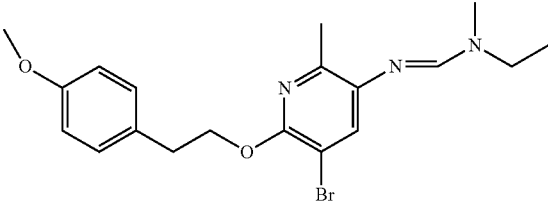
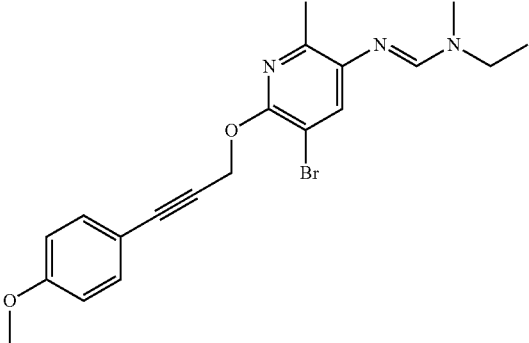
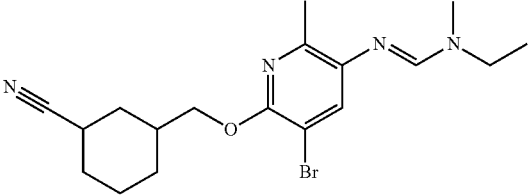
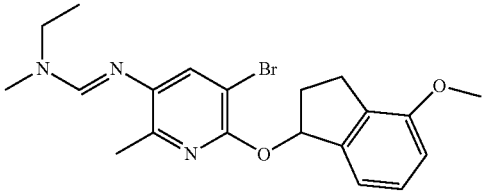
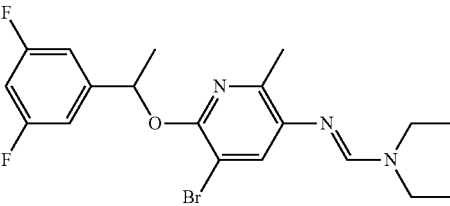
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Cpd No.	Structure
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Cpd No.	Structure
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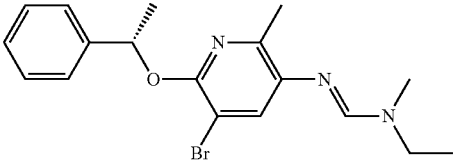
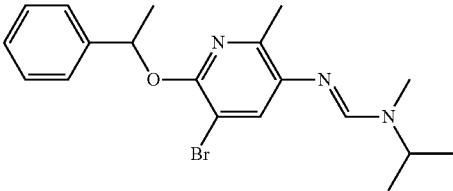
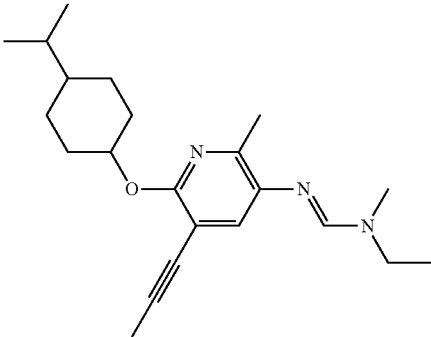
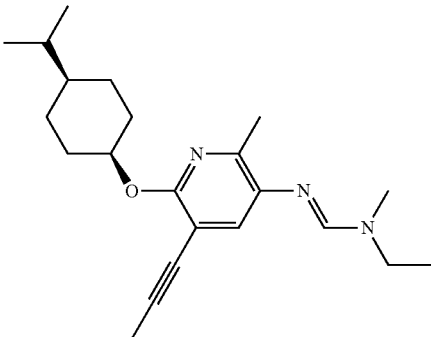
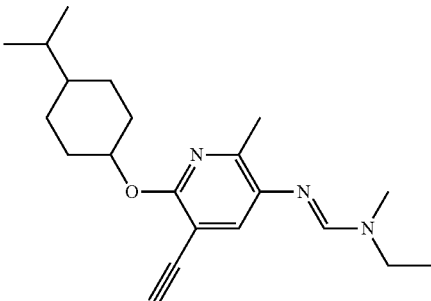
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Cpd No.	Structure
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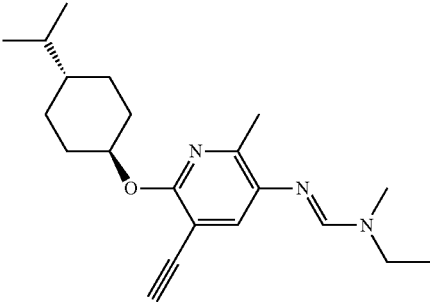
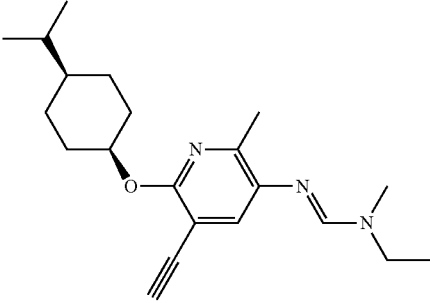
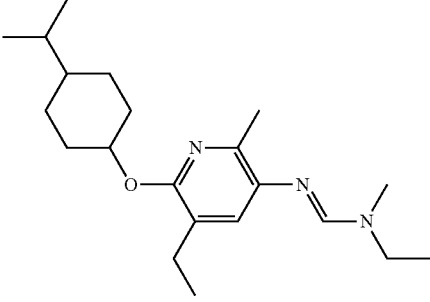
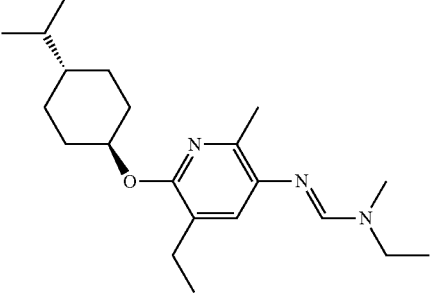
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Cpd No.	Structure
P.189	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2F)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>
P.190	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2OC3=CC=CC=C3)OC4=C(C)C(=C(C=C4N)N=C5CCNCC5)Br</chem>
P.191	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2N)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>
P.192	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2C)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>
P.193	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2C)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>
P.194	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2C)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>
P.195	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2C)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>
P.196	 <chem>CC1=CC=C(C=C1C2=CC=CC=C2C)OC3=C(C)C(=C(C=C3N)N=C4CCNCC4)Br</chem>

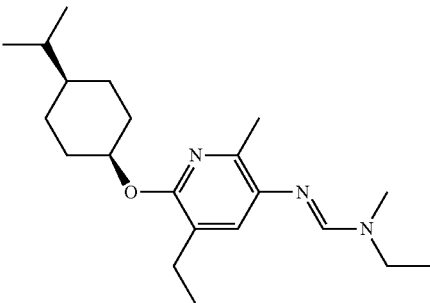
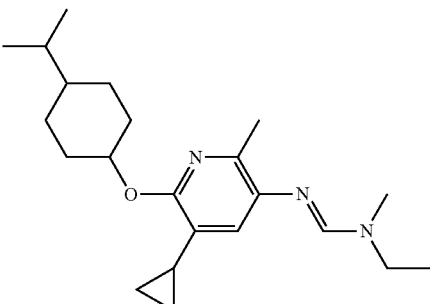
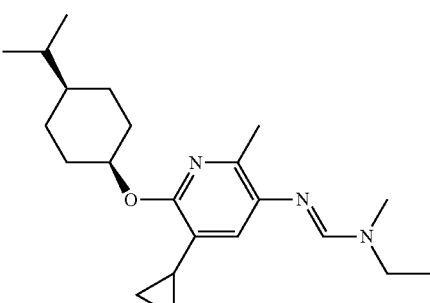
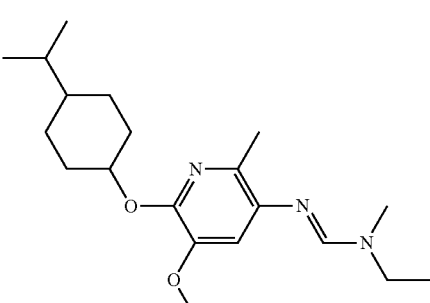
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Cpd No.	Structure
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Cpd No.	Structure
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P.205	

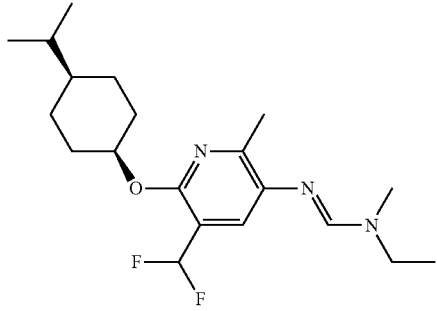
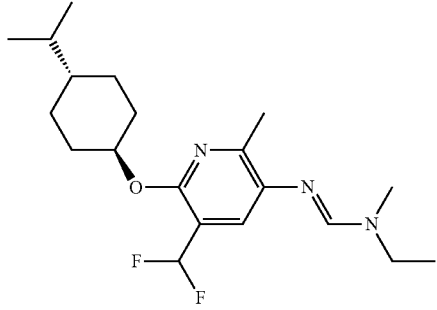
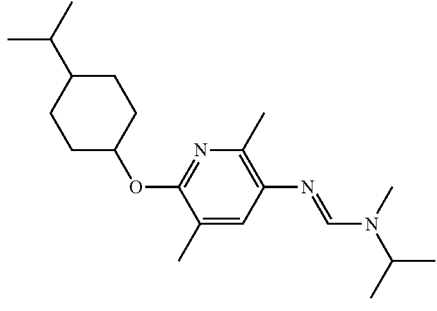
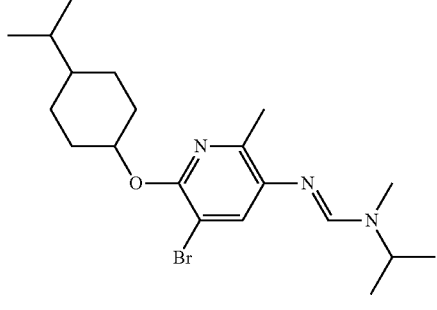
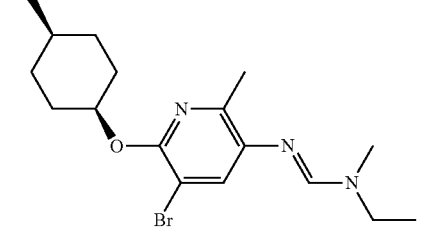
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Cpd	Structure
No.	
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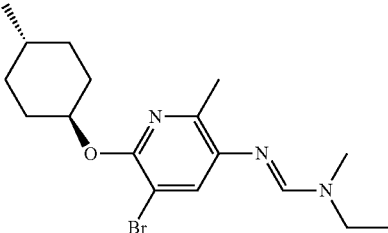
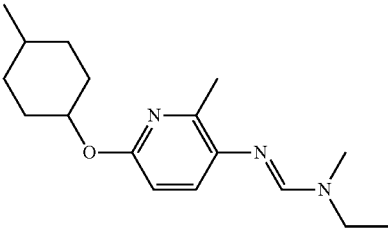
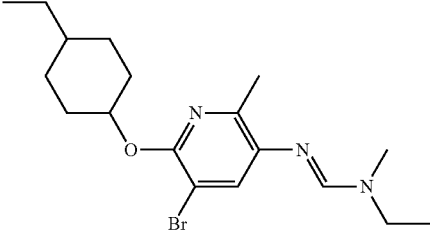
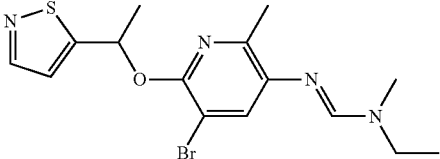
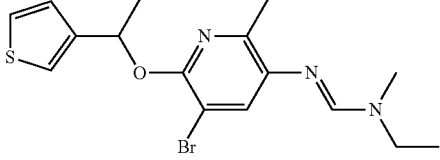
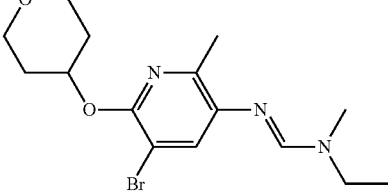
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Cpd No.	Structure
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Cpd No.	Structure
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Cpd No.	Structure
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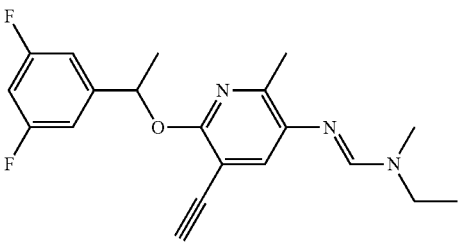
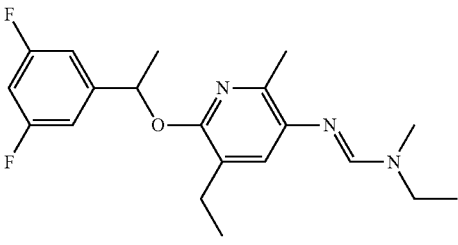
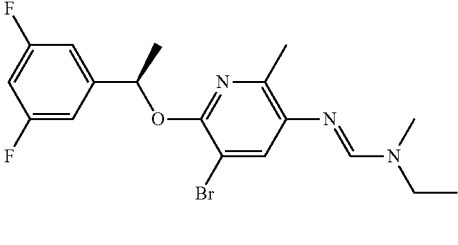
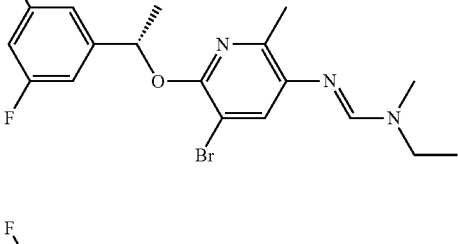
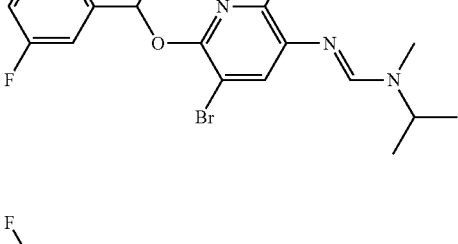
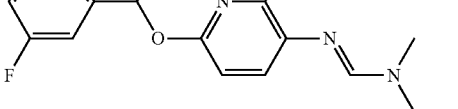
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Cpd No.	Structure
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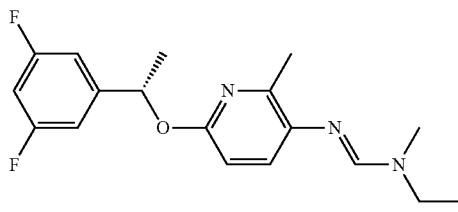
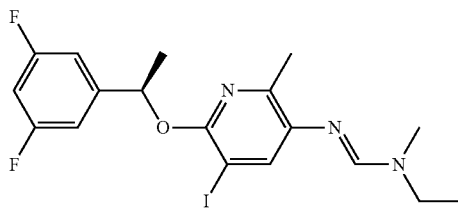
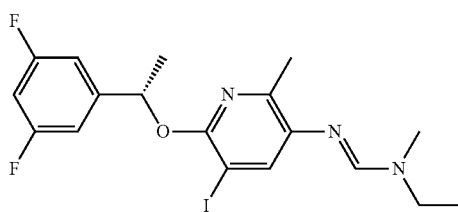
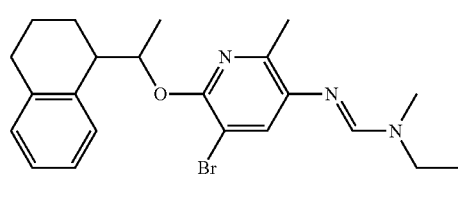
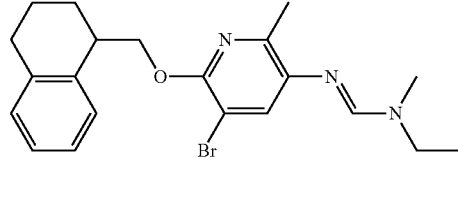
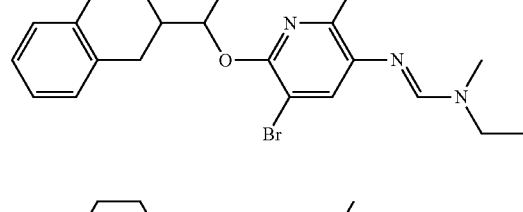
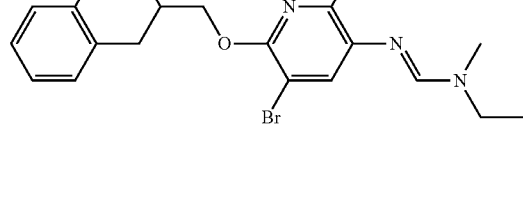
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Cpd No.	Structure
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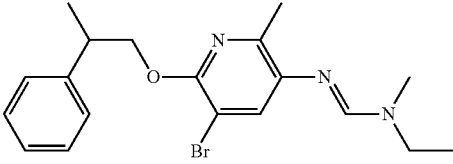
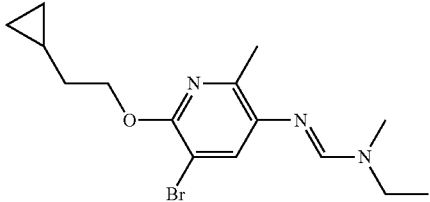
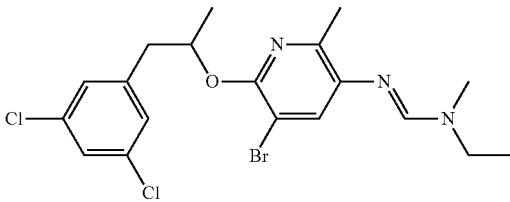
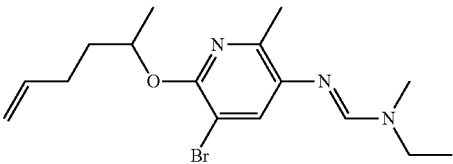
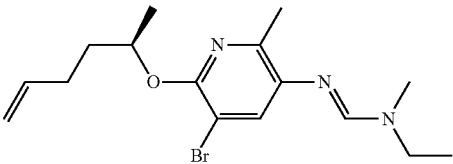
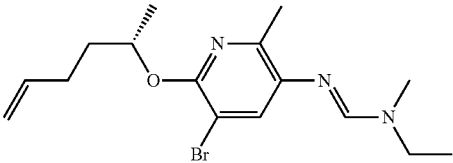
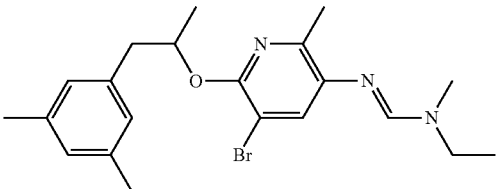
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Cpd No.	Structure
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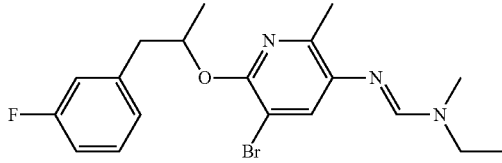
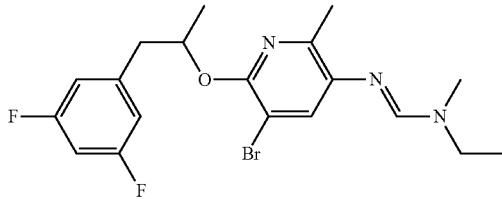
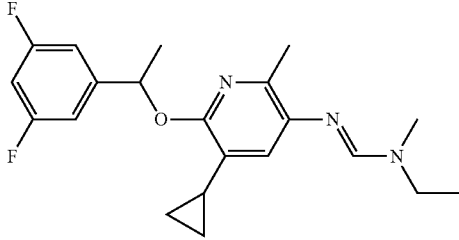
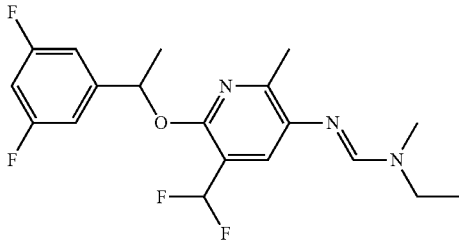
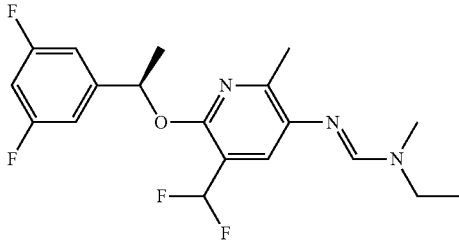
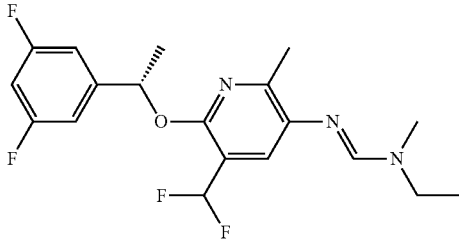
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Cpd No.	Structure
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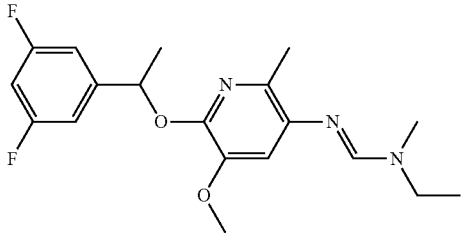
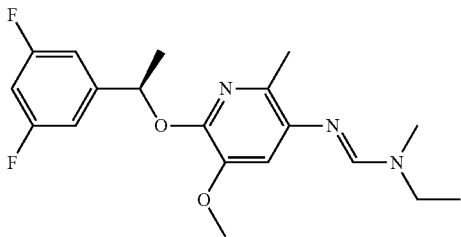
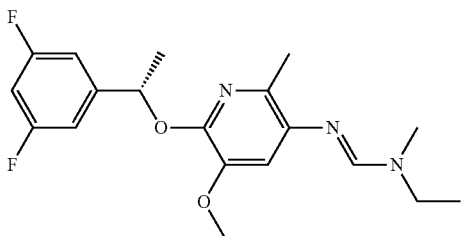
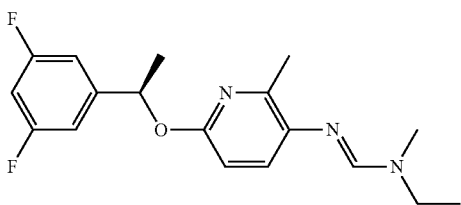
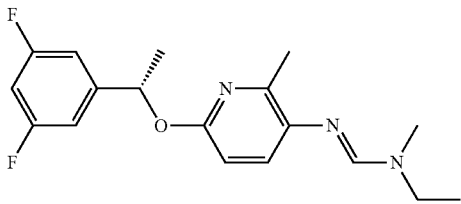
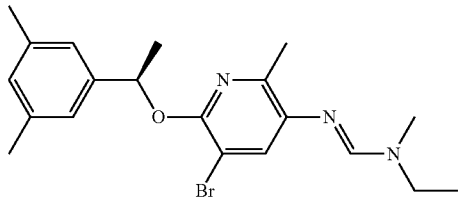
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Cpd No.	Structure
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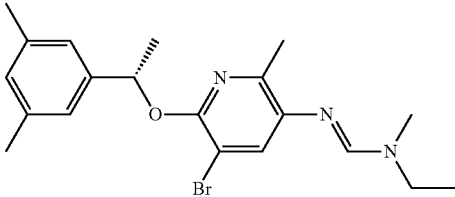
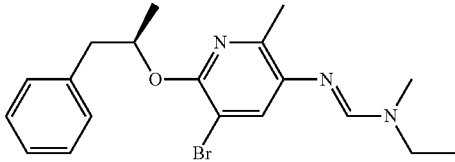
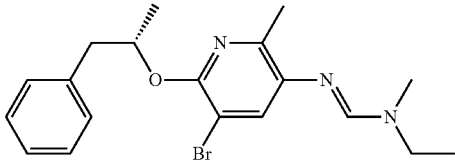
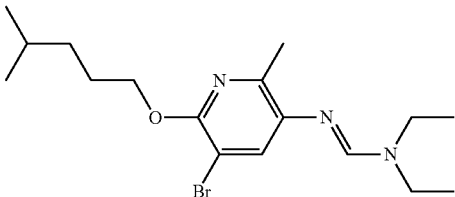
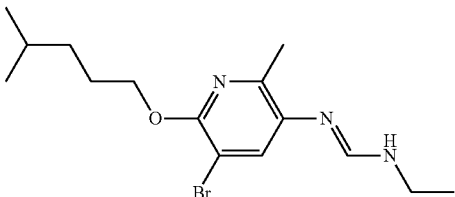
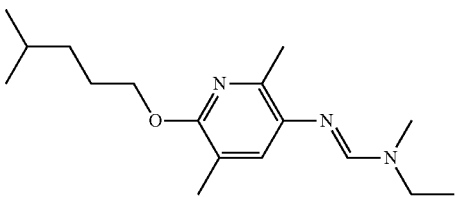
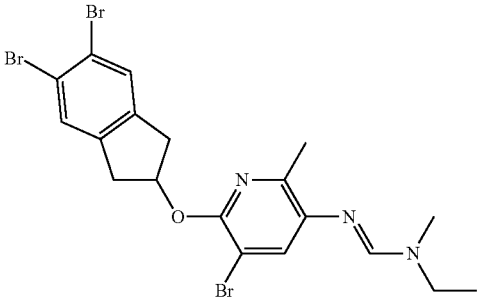
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Cpd No.	Structure
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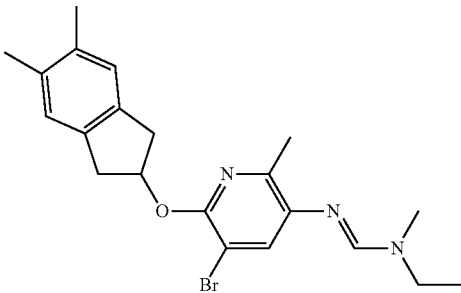
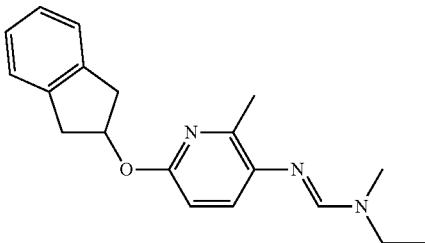
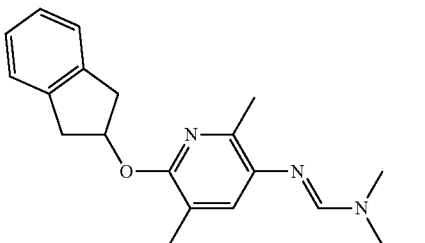
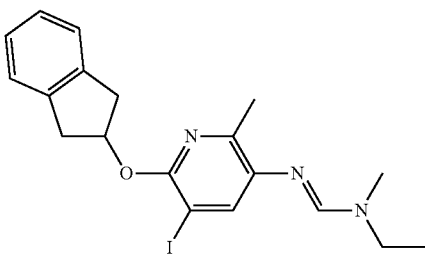
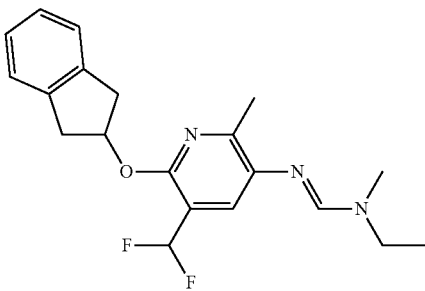
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Cpd No.	Structure
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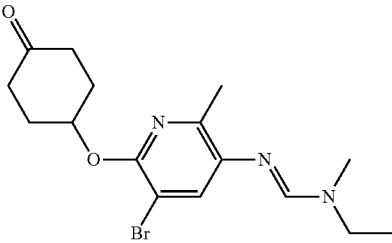
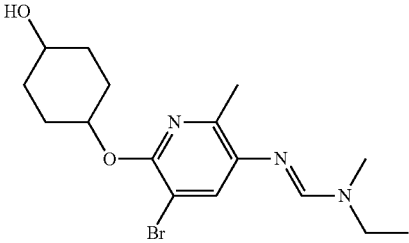
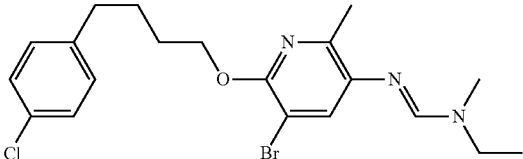
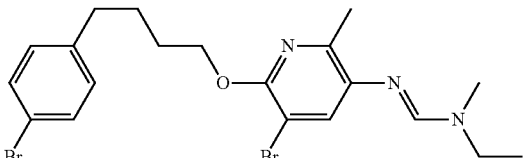
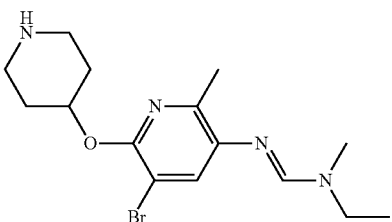
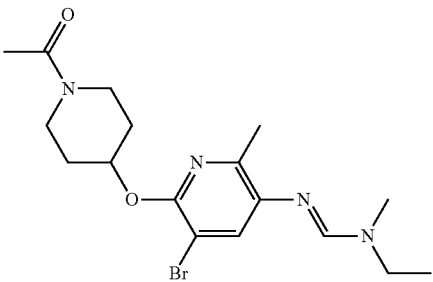
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Cpd No.	Structure
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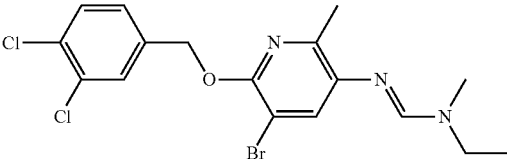
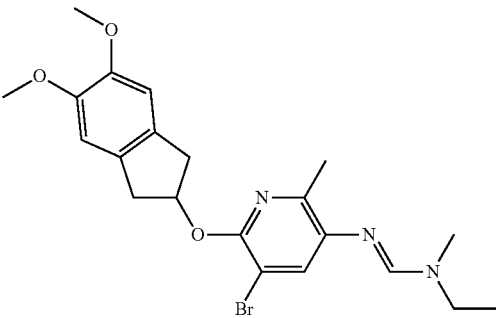
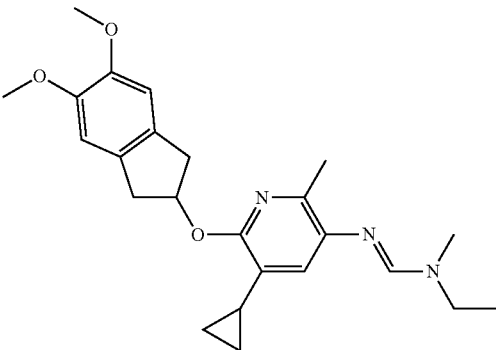
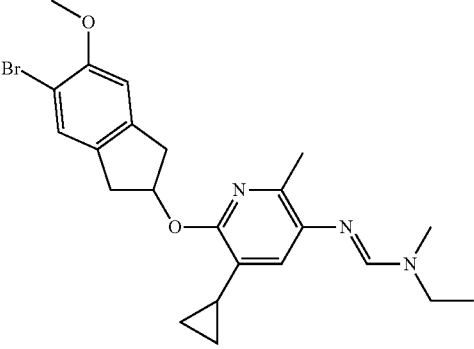
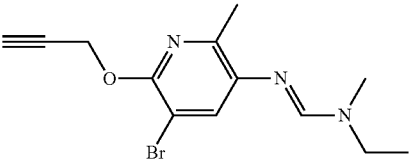
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Cpd No.	Structure
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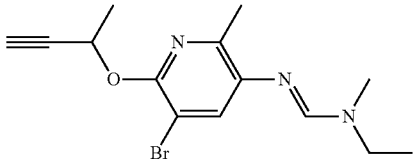
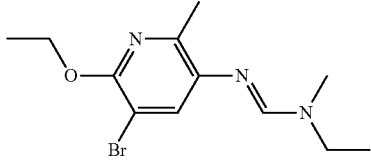
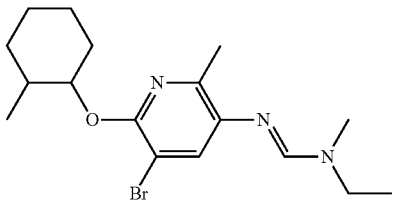
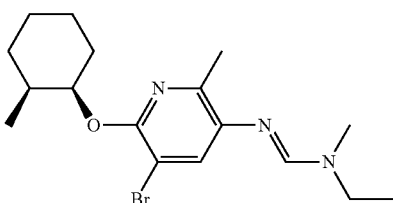
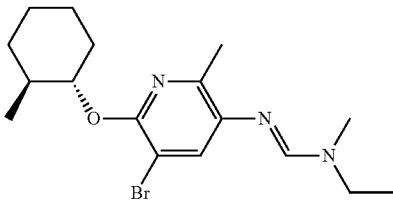
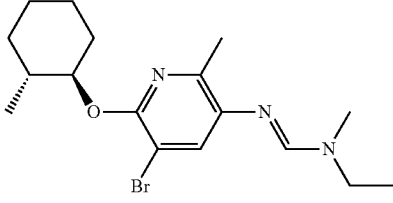
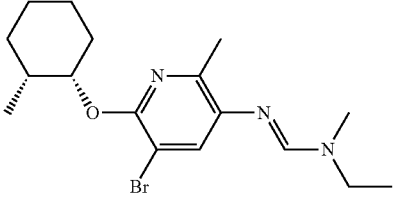
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Cpd No.	Structure
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Cpd No.	Structure
P.288	 <chem>CCN(CC)C=Cc1cc(Br)c(OCc2ccc(Cl)c(Cl)c2)n(C)c1</chem>
P.289	 <chem>CCN(CC)C=Cc1cc(Br)c(OCc2c3cc(OC)c(OC)cc3cc2)nc(C)c1</chem>
P.290	 <chem>CCN(CC)C=Cc1cc(Br)c(OCc2c3cc(OC)c(OC)cc3cc2C4CC4)nc(C)c1</chem>
P.291	 <chem>CCN(CC)C=Cc1cc(Br)c(OCc2c3cc(OC)c(Br)cc3cc2C4CC4)nc(C)c1</chem>
P.292	 <chem>CCN(CC)C=Cc1cc(Br)c(OCCC#C)nc(C)c1</chem>

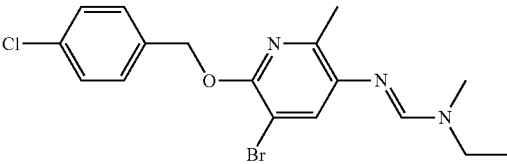
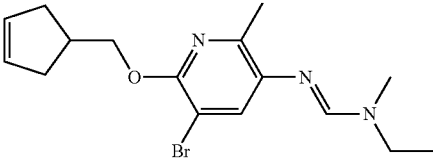
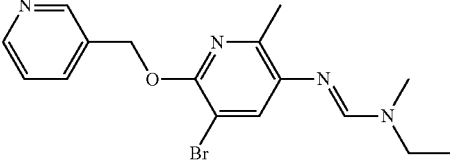
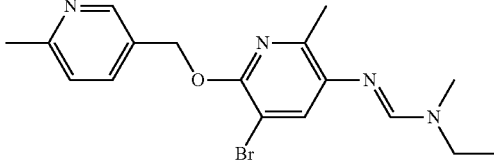
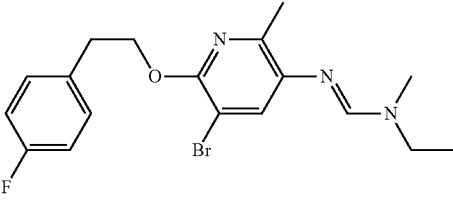
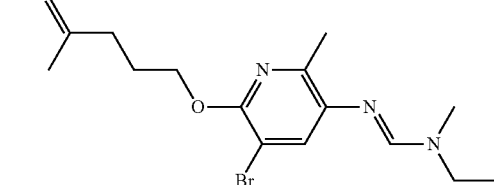
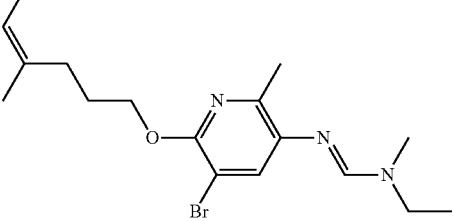
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Cpd No.	Structure
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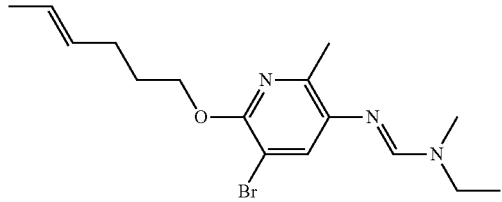
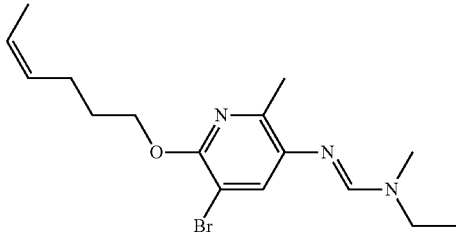
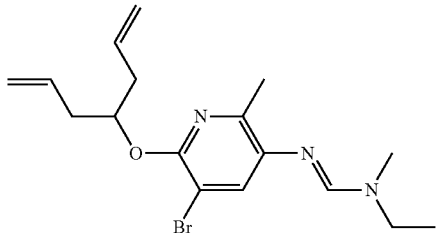
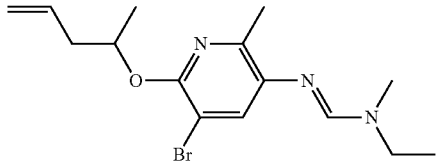
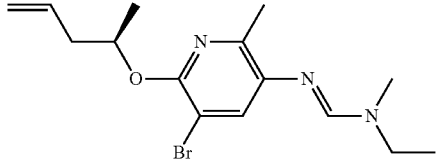
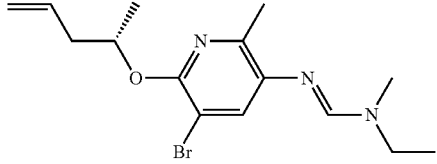
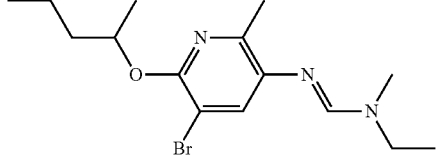
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Cpd No.	Structure
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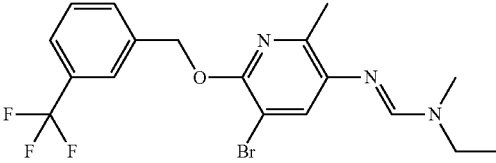
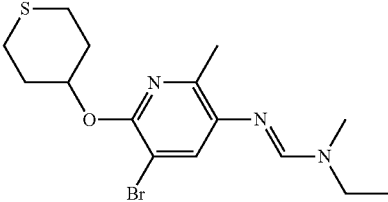
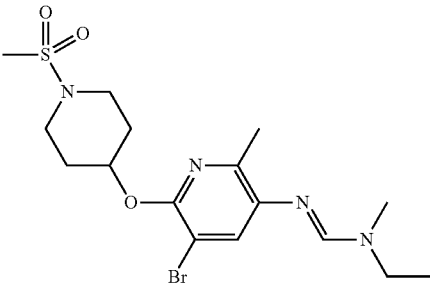
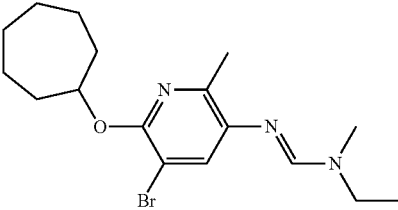
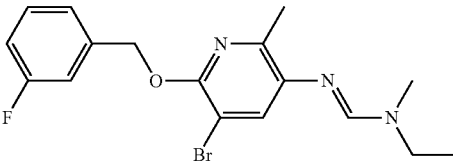
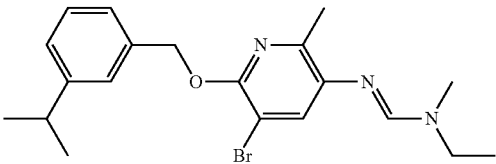
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Cpd No.	Structure
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Cpd No.	Structure
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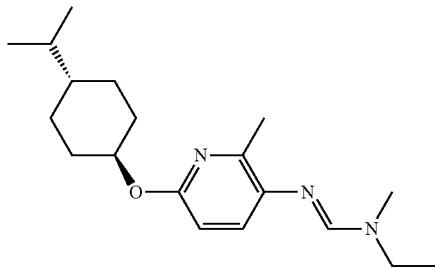
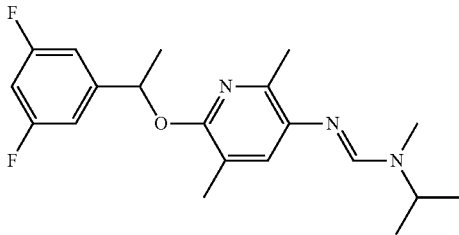
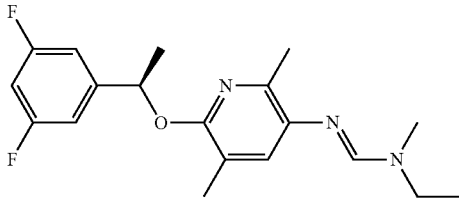
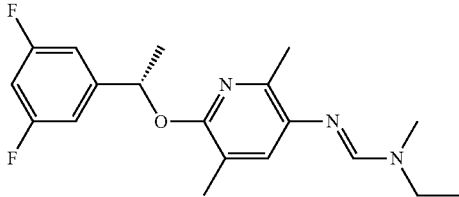
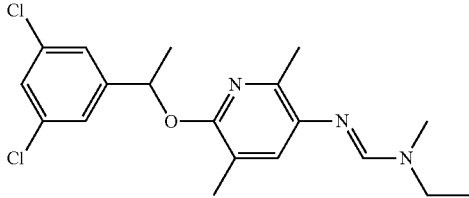
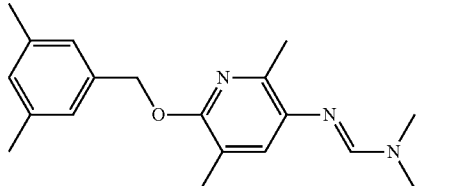
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Cpd No.	Structure
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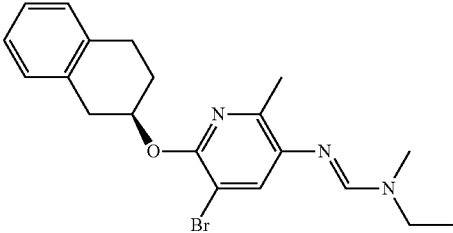
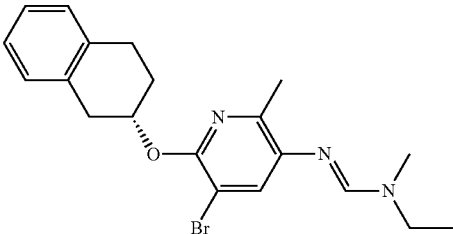
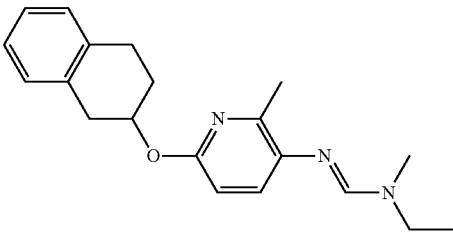
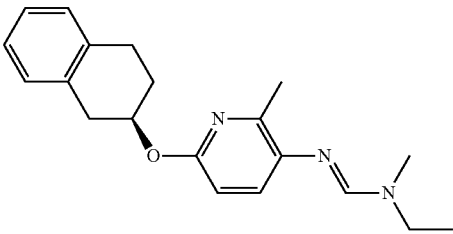
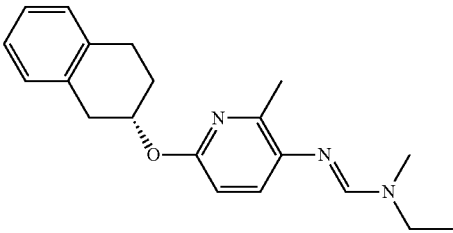
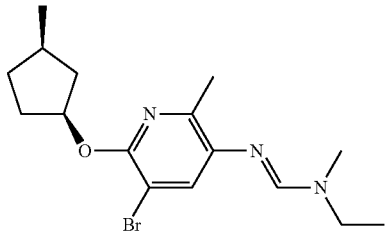
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Cpd No.	Structure
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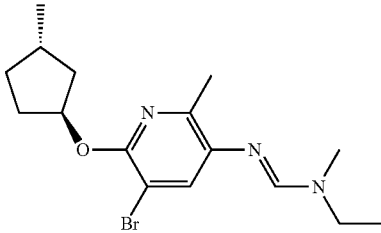
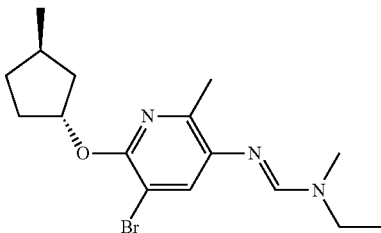
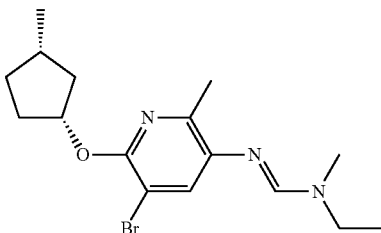
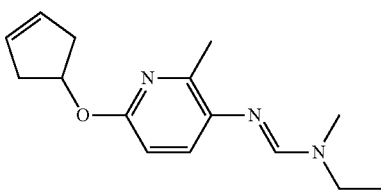
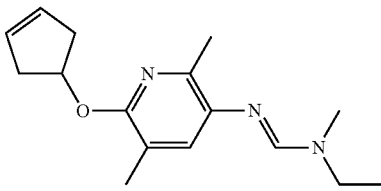
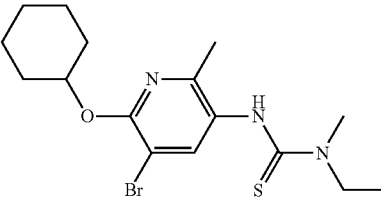
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Cpd No.	Structure
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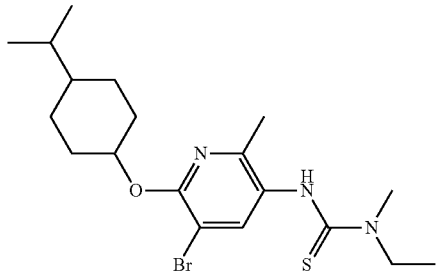
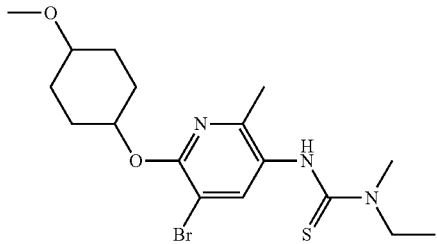
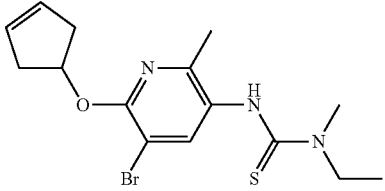
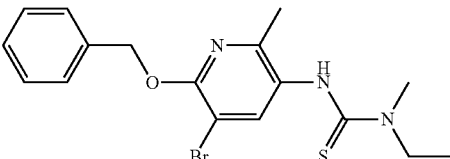
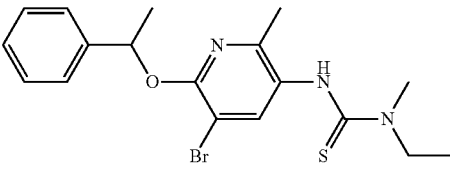
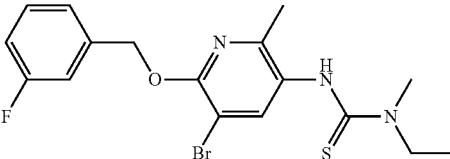
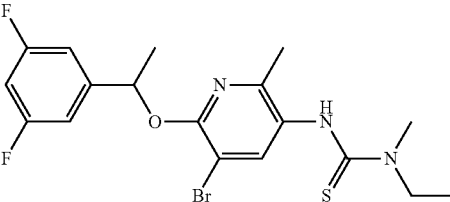
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Cpd No.	Structure
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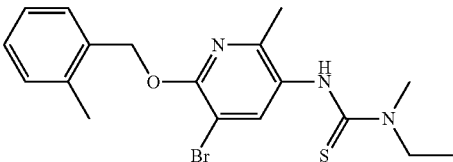
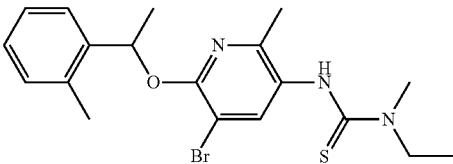
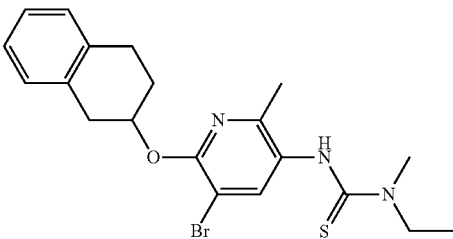
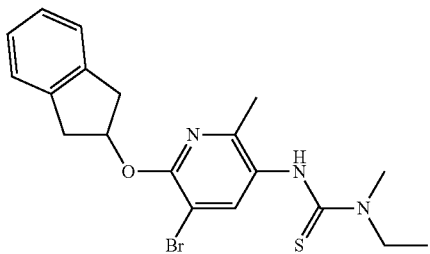
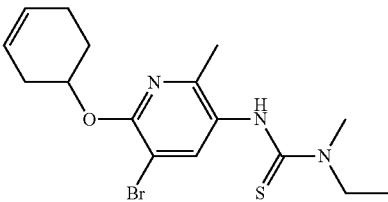
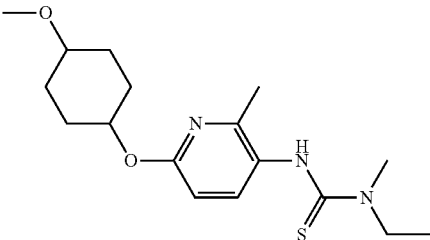
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Cpd No.	Structure
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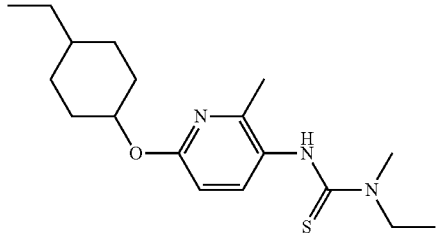
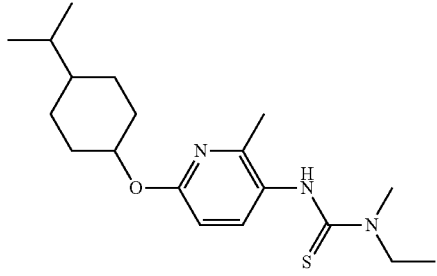
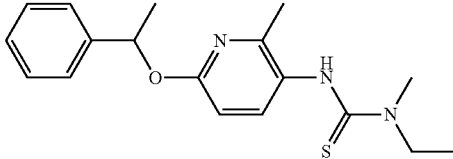
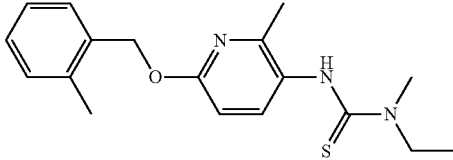
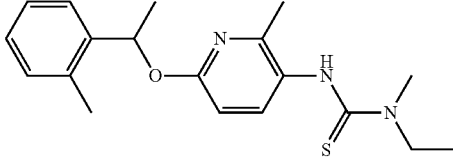
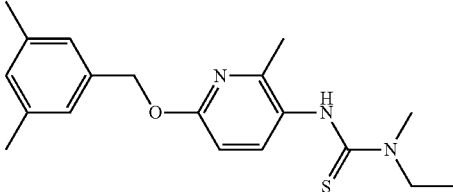
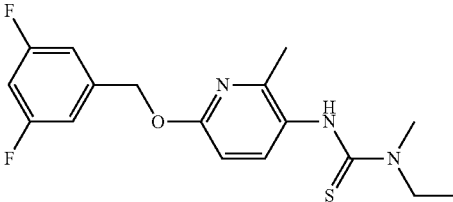
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Cpd No.	Structure
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Cpd No.	Structure
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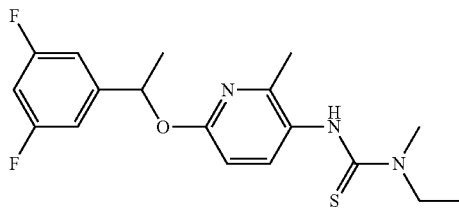
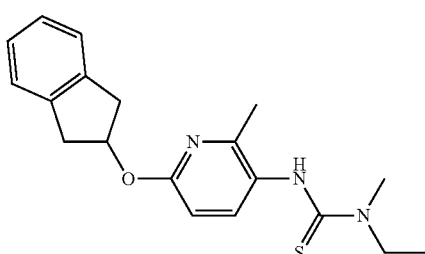
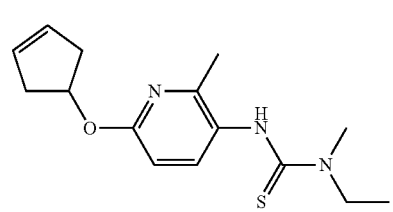
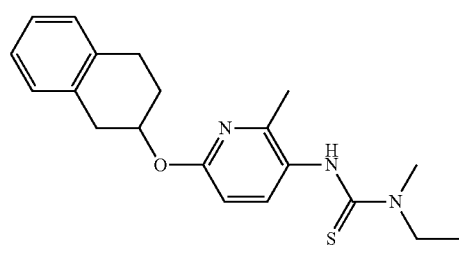
Cpd No.	Structure
P.369	
P.370	
P.371	
P.372	

Table A discloses 1201 sets of meanings of the variables ⁴⁵ R₁, R₂, R₅ and R₆ in a compound of formula I.

TABLE A

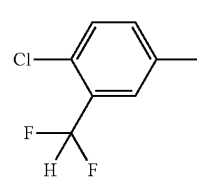
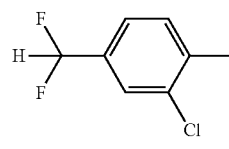
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
Line	R ₁	R ₂	R ₆	R ₅
A.1.1	CH ₃	CH ₂ CH ₃	H	
A.1.2	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

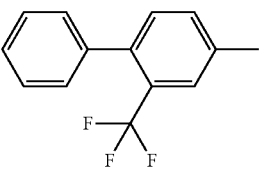
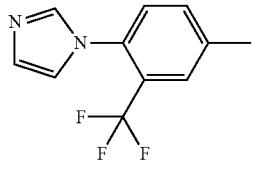
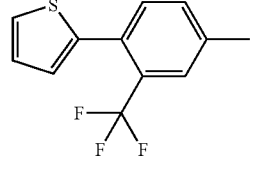
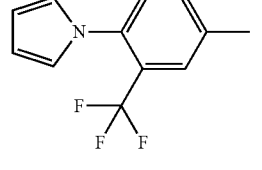
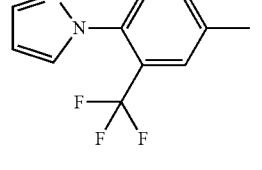
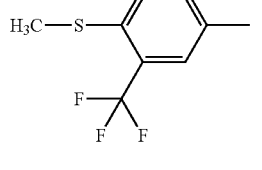
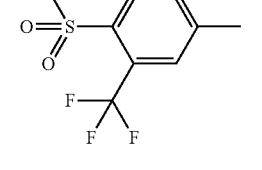
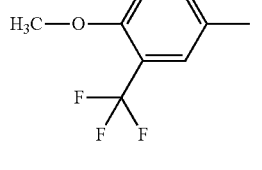
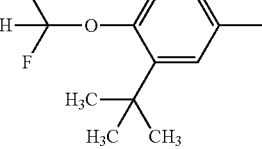
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.3	CH ₃	CH ₂ CH ₃	H	
A.1.4	CH ₃	CH ₂ CH ₃	H	
A.1.5	CH ₃	CH ₂ CH ₃	H	
A.1.6	CH ₃	CH ₂ CH ₃	H	
A.1.7	CH ₃	CH ₂ CH ₃	H	
A.1.8	CH ₃	CH ₂ CH ₃	H	
A.1.9	CH ₃	CH ₂ CH ₃	H	
A.1.10	CH ₃	CH ₂ CH ₃	H	
A.1.11	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

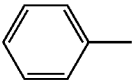
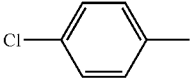
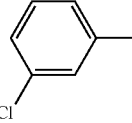
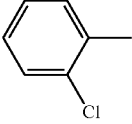
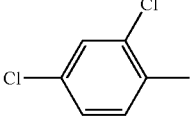
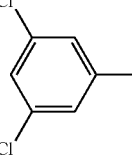
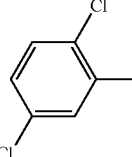
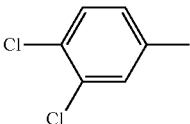
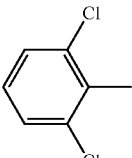
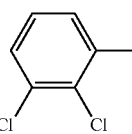
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.12	CH ₃	CH ₂ CH ₃	H	
A.1.13	CH ₃	CH ₂ CH ₃	H	
A.1.14	CH ₃	CH ₂ CH ₃	H	
A.1.15	CH ₃	CH ₂ CH ₃	H	
A.1.16	CH ₃	CH ₂ CH ₃	H	
A.1.17	CH ₃	CH ₂ CH ₃	H	
A.1.18	CH ₃	CH ₂ CH ₃	H	
A.1.19	CH ₃	CH ₂ CH ₃	H	
A.1.20	CH ₃	CH ₂ CH ₃	H	
A.1.21	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.22	CH ₃	CH ₂ CH ₃	H	
A.1.23	CH ₃	CH ₂ CH ₃	H	
A.1.24	CH ₃	CH ₂ CH ₃	H	
A.1.25	CH ₃	CH ₂ CH ₃	H	
A.1.26	CH ₃	CH ₂ CH ₃	H	
A.1.27	CH ₃	CH ₂ CH ₃	H	
A.1.28	CH ₃	CH ₂ CH ₃	H	
A.1.29	CH ₃	CH ₂ CH ₃	H	
A.1.30	CH ₃	CH ₂ CH ₃	H	
A.1.31	CH ₃	CH ₂ CH ₃	H	
A.1.32	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

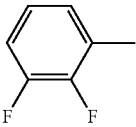
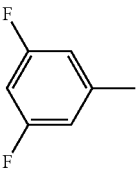
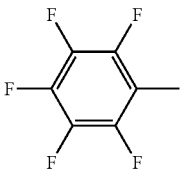
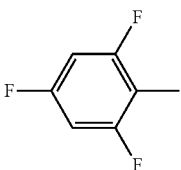
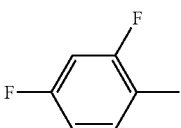
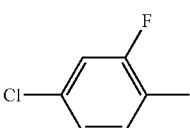
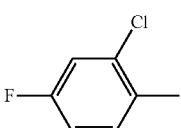
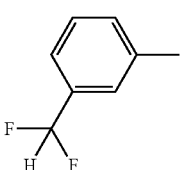
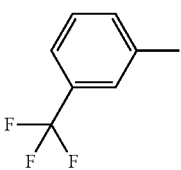
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.33	CH ₃	CH ₂ CH ₃	H	
A.1.34	CH ₃	CH ₂ CH ₃	H	
A.1.35	CH ₃	CH ₂ CH ₃	H	
A.1.36	CH ₃	CH ₂ CH ₃	H	
A.1.37	CH ₃	CH ₂ CH ₃	H	
A.1.38	CH ₃	CH ₂ CH ₃	H	
A.1.39	CH ₃	CH ₂ CH ₃	H	
A.1.40	CH ₃	CH ₂ CH ₃	H	
A.1.41	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

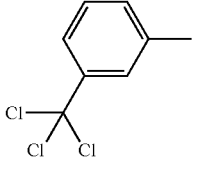
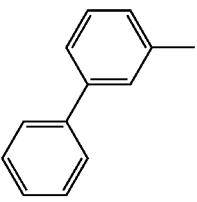
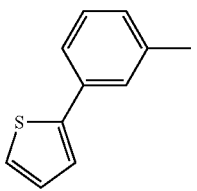
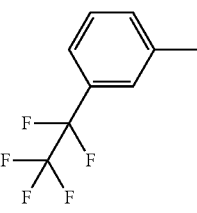
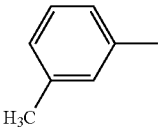
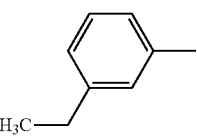
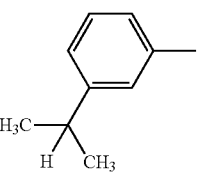
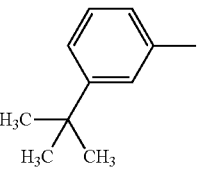
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.42	CH ₃	CH ₂ CH ₃	H	
A.1.43	CH ₃	CH ₂ CH ₃	H	
A.1.44	CH ₃	CH ₂ CH ₃	H	
A.1.45	CH ₃	CH ₂ CH ₃	H	
A.1.46	CH ₃	CH ₂ CH ₃	H	
A.1.47	CH ₃	CH ₂ CH ₃	H	
A.1.48	CH ₃	CH ₂ CH ₃	H	
A.1.49	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

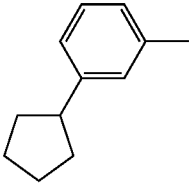
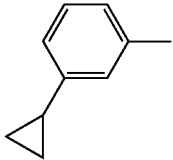
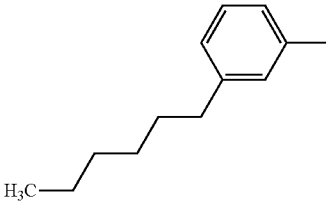
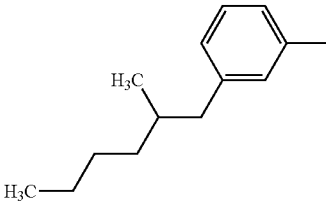
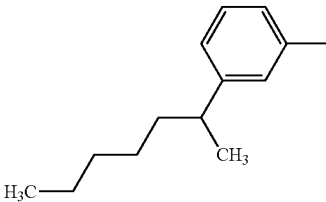
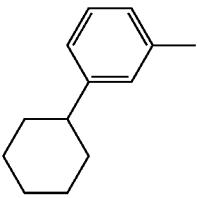
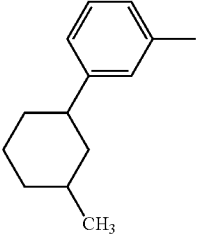
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.50	CH ₃	CH ₂ CH ₃	H	
A.1.51	CH ₃	CH ₂ CH ₃	H	
A.1.52	CH ₃	CH ₂ CH ₃	H	
A.1.53	CH ₃	CH ₂ CH ₃	H	
A.1.54	CH ₃	CH ₂ CH ₃	H	
A.1.55	CH ₃	CH ₂ CH ₃	H	
A.1.56	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

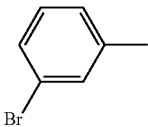
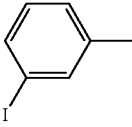
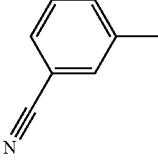
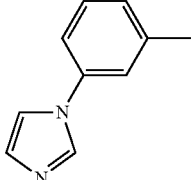
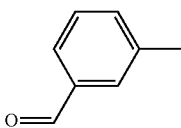
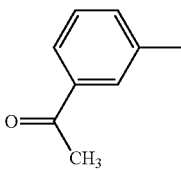
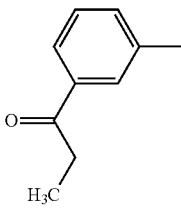
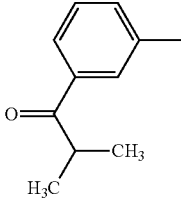
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.57	CH ₃	CH ₂ CH ₃	H	
A.1.58	CH ₃	CH ₂ CH ₃	H	
A.1.59	CH ₃	CH ₂ CH ₃	H	
A.1.60	CH ₃	CH ₂ CH ₃	H	
A.1.61	CH ₃	CH ₂ CH ₃	H	
A.1.62	CH ₃	CH ₂ CH ₃	H	
A.1.63	CH ₃	CH ₂ CH ₃	H	
A.1.64	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

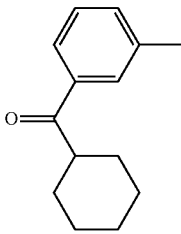
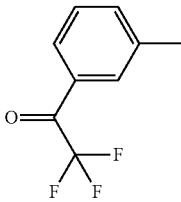
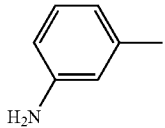
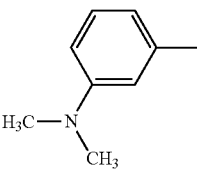
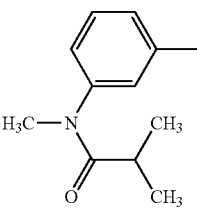
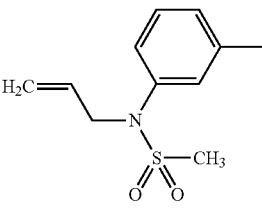
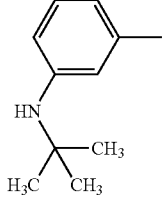
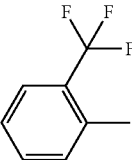
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.65	CH ₃	CH ₂ CH ₃	H	
A.1.66	CH ₃	CH ₂ CH ₃	H	
A.1.67	CH ₃	CH ₂ CH ₃	H	
A.1.68	CH ₃	CH ₂ CH ₃	H	
A.1.69	CH ₃	CH ₂ CH ₃	H	
A.1.70	CH ₃	CH ₂ CH ₃	H	
A.1.71	CH ₃	CH ₂ CH ₃	H	
A.1.72	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

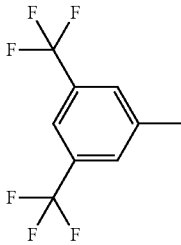
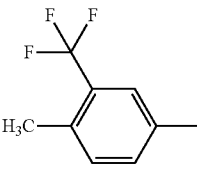
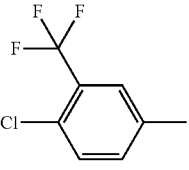
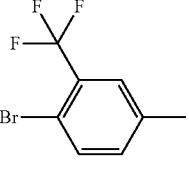
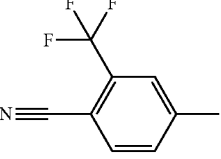
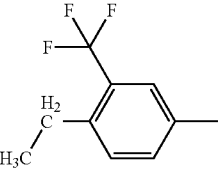
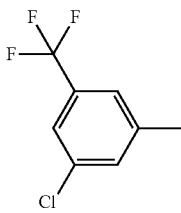
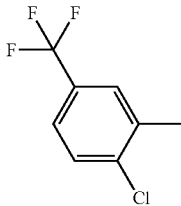
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.73	CH ₃	CH ₂ CH ₃	H	
A.1.74	CH ₃	CH ₂ CH ₃	H	
A.1.75	CH ₃	CH ₂ CH ₃	H	
A.1.76	CH ₃	CH ₂ CH ₃	H	
A.1.77	CH ₃	CH ₂ CH ₃	H	
A.1.78	CH ₃	CH ₂ CH ₃	H	
A.1.79	CH ₃	CH ₂ CH ₃	H	
A.1.80	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.81	CH ₃	CH ₂ CH ₃	H	
A.1.82	CH ₃	CH ₂ CH ₃	H	
A.1.83	CH ₃	CH ₂ CH ₃	H	
A.1.84	CH ₃	CH ₂ CH ₃	H	
A.1.85	CH ₃	CH ₂ CH ₃	H	
A.1.86	CH ₃	CH ₂ CH ₃	H	
A.1.87	CH ₃	CH ₂ CH ₃	H	
A.1.88	CH ₃	CH ₂ CH ₃	H	
A.1.89	CH ₃	CH ₂ CH ₃	H	
A.1.90	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

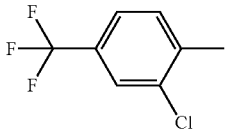
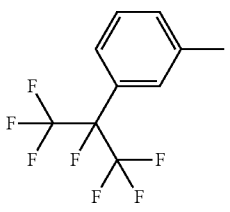
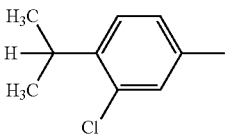
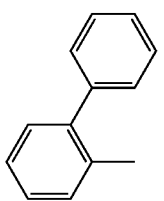
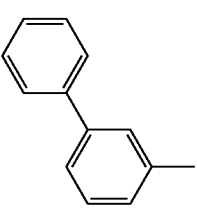
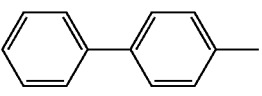
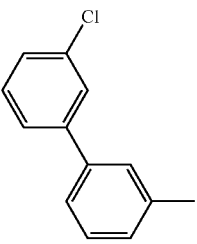
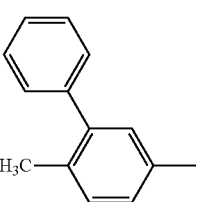
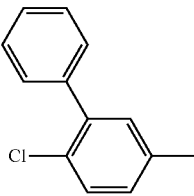
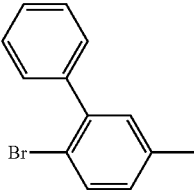
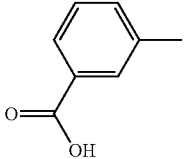
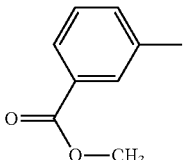
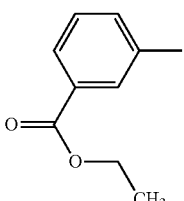
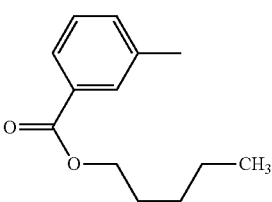
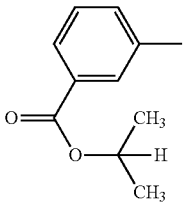
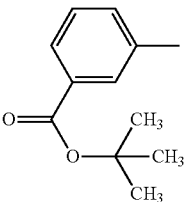
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.91	CH ₃	CH ₂ CH ₃	H	
A.1.92	CH ₃	CH ₂ CH ₃	H	
A.1.93	CH ₃	CH ₂ CH ₃	H	
A.1.94	CH ₃	CH ₂ CH ₃	H	
A.1.95	CH ₃	CH ₂ CH ₃	H	
A.1.96	CH ₃	CH ₂ CH ₃	H	
A.1.97	CH ₃	CH ₂ CH ₃	H	
A.1.98	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.99	CH ₃	CH ₂ CH ₃	H	
A.1.100	CH ₃	CH ₂ CH ₃	H	
A.1.101	CH ₃	CH ₂ CH ₃	H	
A.1.102	CH ₃	CH ₂ CH ₃	H	
A.1.103	CH ₃	CH ₂ CH ₃	H	
A.1.104	CH ₃	CH ₂ CH ₃	H	
A.1.105	CH ₃	CH ₂ CH ₃	H	
A.1.106	CH ₃	CH ₂ CH ₃	H	

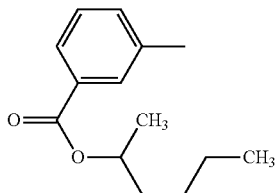
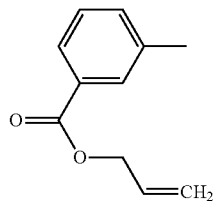
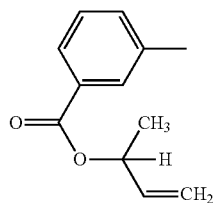
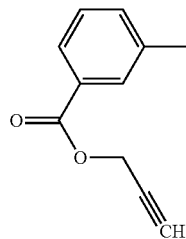
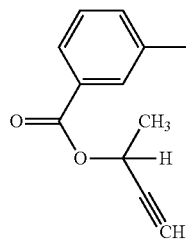
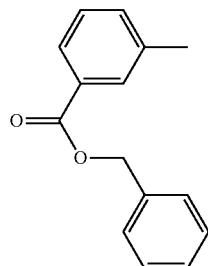
Meanings for R₁, R₂, R₅ and R₆:A.1.107 CH₃ CH₂CH₃ HA.1.108 CH₃ CH₂CH₃ HA.1.109 CH₃ CH₂CH₃ HA.1.110 CH₃ CH₂CH₃ HA.1.111 CH₃ CH₂CH₃ HA.1.112 CH₃ CH₂CH₃ H

TABLE A-continued

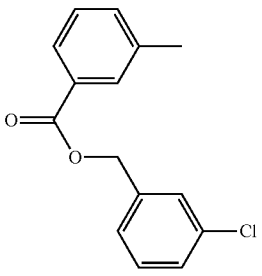
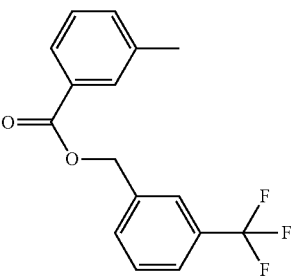
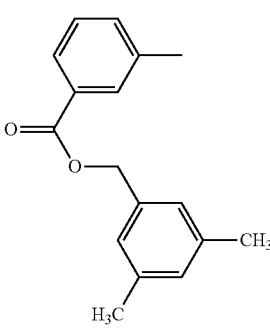
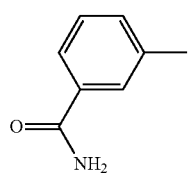
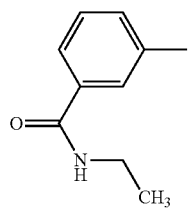
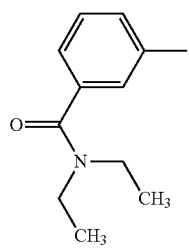
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.113	CH ₃	CH ₂ CH ₃	H	
A.1.114	CH ₃	CH ₂ CH ₃	H	
A.1.115	CH ₃	CH ₂ CH ₃	H	
A.1.116	CH ₃	CH ₂ CH ₃	H	
A.1.117	CH ₃	CH ₂ CH ₃	H	
A.1.118	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

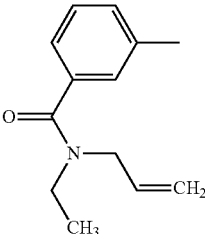
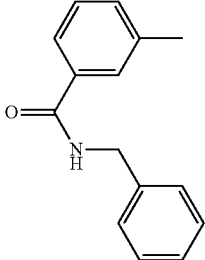
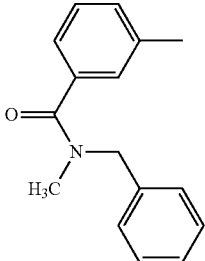
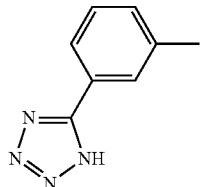
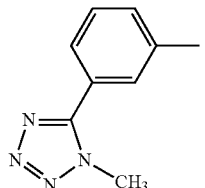
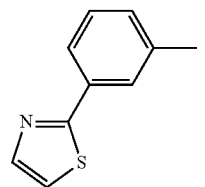
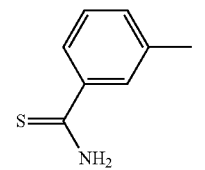
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.119	CH ₃	CH ₂ CH ₃	H	
A.1.120	CH ₃	CH ₂ CH ₃	H	
A.1.121	CH ₃	CH ₂ CH ₃	H	
A.1.122	CH ₃	CH ₂ CH ₃	H	
A.1.123	CH ₃	CH ₂ CH ₃	H	
A.1.124	CH ₃	CH ₂ CH ₃	H	
A.1.125	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

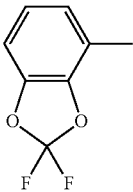
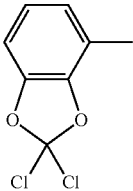
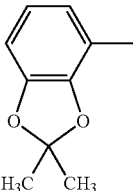
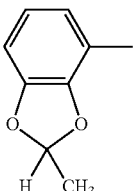
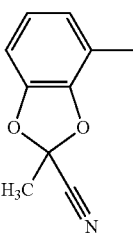
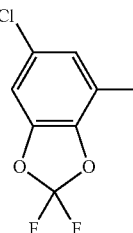
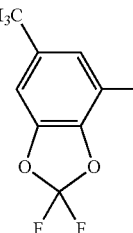
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.126	CH ₃	CH ₂ CH ₃	H	
A.1.127	CH ₃	CH ₂ CH ₃	H	
A.1.128	CH ₃	CH ₂ CH ₃	H	
A.1.129	CH ₃	CH ₂ CH ₃	H	
A.1.130	CH ₃	CH ₂ CH ₃	H	
A.1.131	CH ₃	CH ₂ CH ₃	H	
A.1.132	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

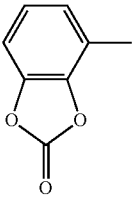
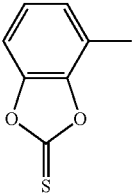
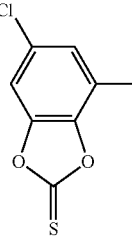
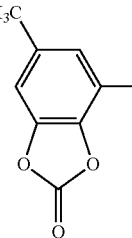
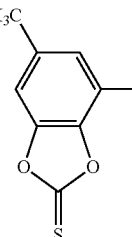
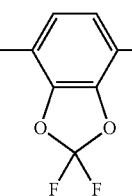
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.133	CH ₃	CH ₂ CH ₃	H	
A.1.134	CH ₃	CH ₂ CH ₃	H	
A.1.135	CH ₃	CH ₂ CH ₃	H	
A.1.136	CH ₃	CH ₂ CH ₃	H	
A.1.137	CH ₃	CH ₂ CH ₃	H	
A.1.138	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.139	CH ₃	CH ₂ CH ₃	H	
A.1.140	CH ₃	CH ₂ CH ₃	H	
A.1.141	CH ₃	CH ₂ CH ₃	H	
A.1.142	CH ₃	CH ₂ CH ₃	H	
A.1.143	CH ₃	CH ₂ CH ₃	H	
A.1.144	CH ₃	CH ₂ CH ₃	H	
A.1.145	CH ₃	CH ₂ CH ₃	H	
A.1.146	CH ₃	CH ₂ CH ₃	H	
A.1.147	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

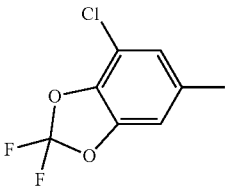
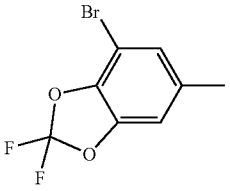
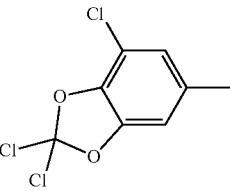
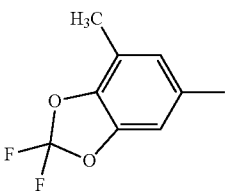
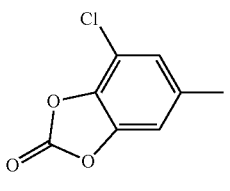
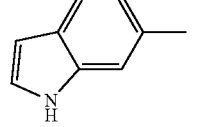
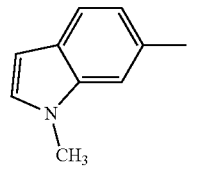
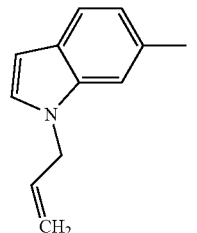
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.148	CH ₃	CH ₂ CH ₃	H	
A.1.149	CH ₃	CH ₂ CH ₃	H	
A.1.150	CH ₃	CH ₂ CH ₃	H	
A.1.151	CH ₃	CH ₂ CH ₃	H	
A.1.152	CH ₃	CH ₂ CH ₃	H	
A.1.153	CH ₃	CH ₂ CH ₃	H	
A.1.154	CH ₃	CH ₂ CH ₃	H	
A.1.155	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

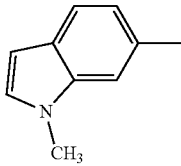
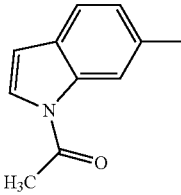
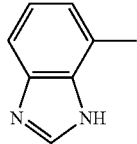
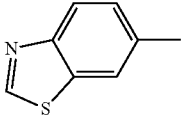
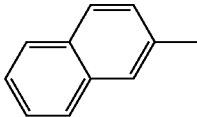
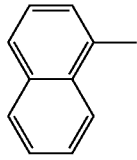
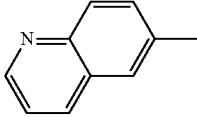
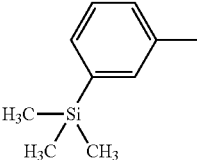
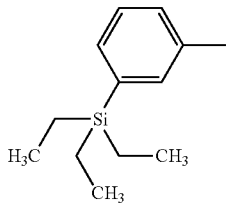
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.156	CH ₃	CH ₂ CH ₃	H	
A.1.157	CH ₃	CH ₂ CH ₃	H	
A.1.158	CH ₃	CH ₂ CH ₃	H	
A.1.159	CH ₃	CH ₂ CH ₃	H	
A.1.160	CH ₃	CH ₂ CH ₃	H	
A.1.161	CH ₃	CH ₂ CH ₃	H	
A.1.162	CH ₃	CH ₂ CH ₃	H	
A.1.163	CH ₃	CH ₂ CH ₃	H	
A.1.164	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.165	CH ₃	CH ₂ CH ₃	H	
A.1.166	CH ₃	CH ₂ CH ₃	H	
A.1.167	CH ₃	CH ₂ CH ₃	H	
A.1.168	CH ₃	CH ₂ CH ₃	H	
A.1.169	CH ₃	CH ₂ CH ₃	H	
A.1.170	CH ₃	CH ₂ CH ₃	H	
A.1.171	CH ₃	CH ₂ CH ₃	H	
A.1.172	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

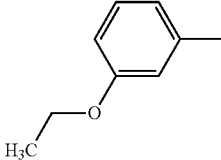
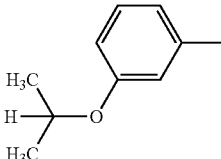
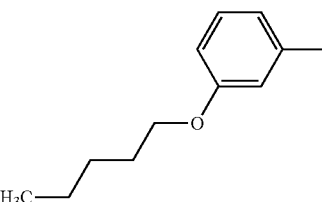
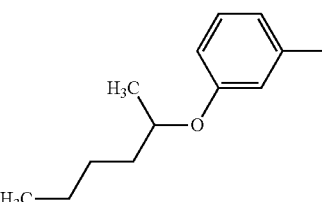
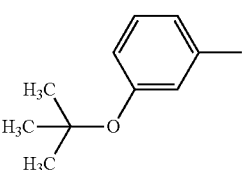
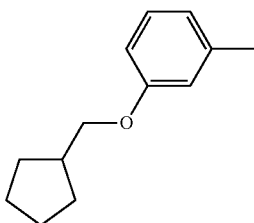
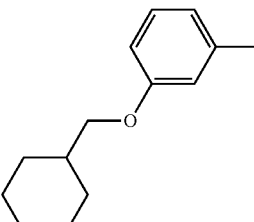
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.173	CH ₃	CH ₂ CH ₃	H	
A.1.174	CH ₃	CH ₂ CH ₃	H	
A.1.175	CH ₃	CH ₂ CH ₃	H	
A.1.176	CH ₃	CH ₂ CH ₃	H	
A.1.177	CH ₃	CH ₂ CH ₃	H	
A.1.178	CH ₃	CH ₂ CH ₃	H	
A.1.179	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

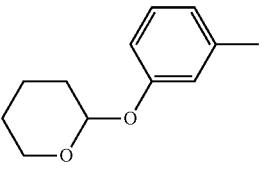
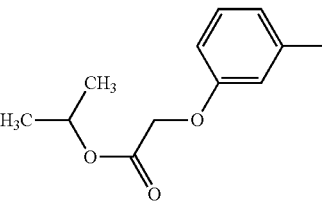
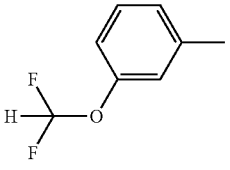
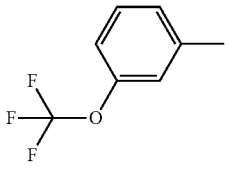
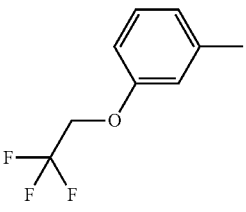
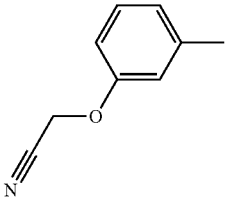
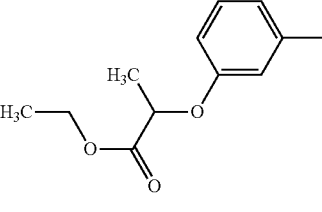
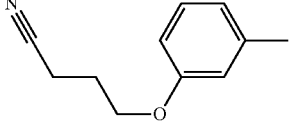
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :			
A.1.180	CH ₃	CH ₂ CH ₃	H
			
A.1.181	CH ₃	CH ₂ CH ₃	H
			
A.1.182	CH ₃	CH ₂ CH ₃	H
			
A.1.183	CH ₃	CH ₂ CH ₃	H
			
A.1.184	CH ₃	CH ₂ CH ₃	H
			
A.1.185	CH ₃	CH ₂ CH ₃	H
			
A.1.186	CH ₃	CH ₂ CH ₃	H
			
A.1.187	CH ₃	CH ₂ CH ₃	H
			

TABLE A-continued

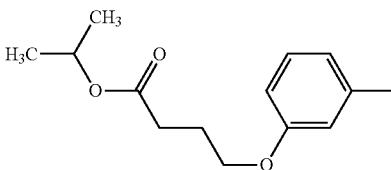
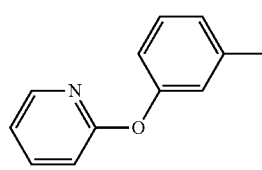
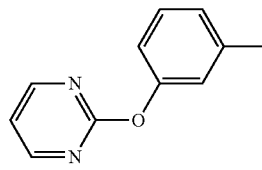
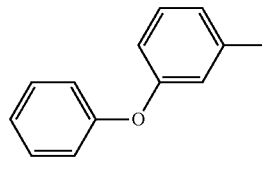
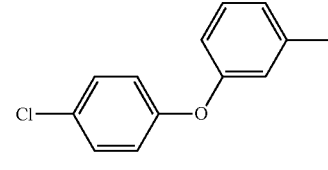
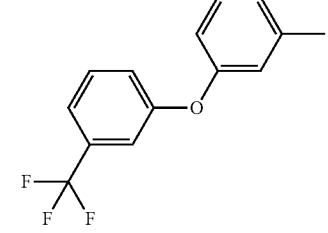
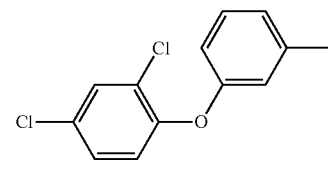
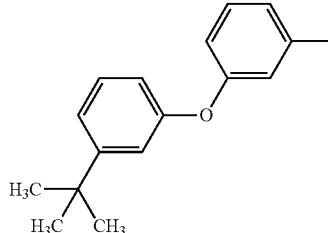
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :			
A.1.188	CH ₃	CH ₂ CH ₃	H
			
A.1.189	CH ₃	CH ₂ CH ₃	H
			
A.1.190	CH ₃	CH ₂ CH ₃	H
			
A.1.191	CH ₃	CH ₂ CH ₃	H
			
A.1.192	CH ₃	CH ₂ CH ₃	H
			
A.1.193	CH ₃	CH ₂ CH ₃	H
			
A.1.194	CH ₃	CH ₂ CH ₃	H
			
A.1.195	CH ₃	CH ₂ CH ₃	H
			

TABLE A-continued

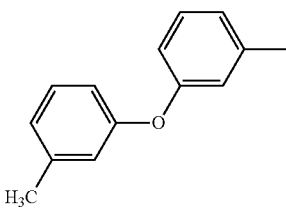
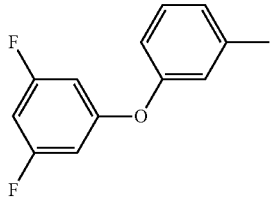
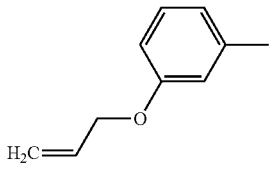
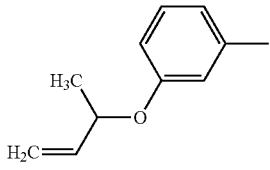
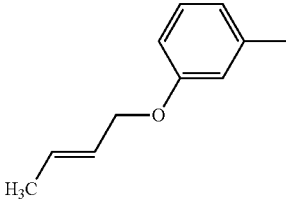
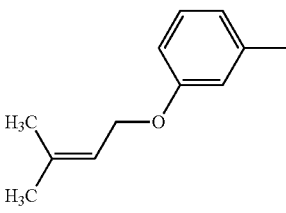
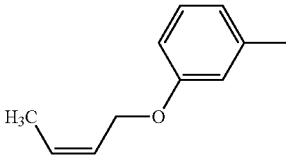
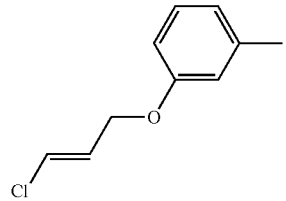
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :			
A.1.196	CH ₃	CH ₂ CH ₃	H
			
A.1.197	CH ₃	CH ₂ CH ₃	H
			
A.1.198	CH ₃	CH ₂ CH ₃	H
			
A.1.199	CH ₃	CH ₂ CH ₃	H
			
A.1.200	CH ₃	CH ₂ CH ₃	H
			
A.1.201	CH ₃	CH ₂ CH ₃	H
			
A.1.202	CH ₃	CH ₂ CH ₃	H
			
A.1.203	CH ₃	CH ₂ CH ₃	H
			

TABLE A-continued

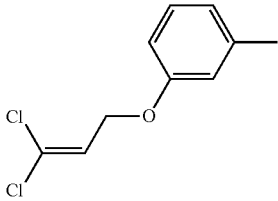
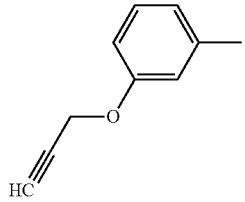
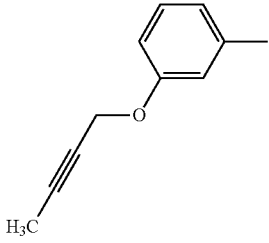
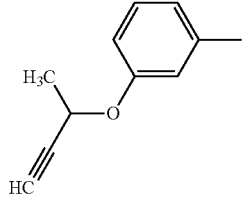
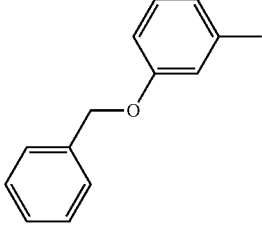
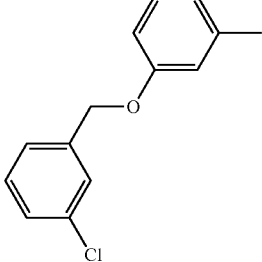
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :			
A.1.204	CH ₃	CH ₂ CH ₃	H
			
A.1.205	CH ₃	CH ₂ CH ₃	H
			
A.1.206	CH ₃	CH ₂ CH ₃	H
			
A.1.207	CH ₃	CH ₂ CH ₃	H
			
A.1.208	CH ₃	CH ₂ CH ₃	H
			
A.1.209	CH ₃	CH ₂ CH ₃	H
			

TABLE A-continued

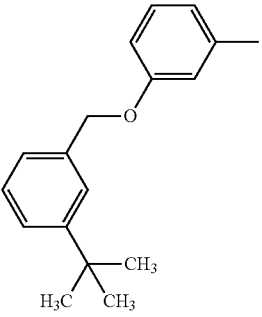
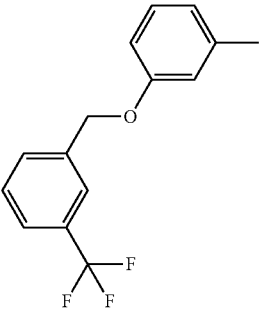
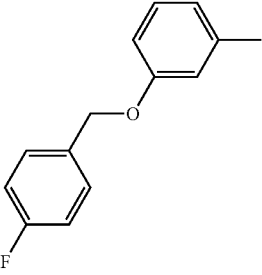
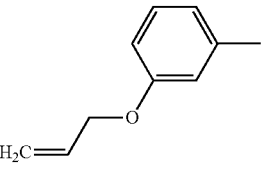
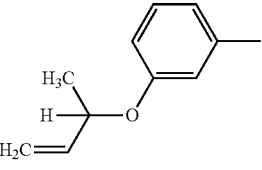
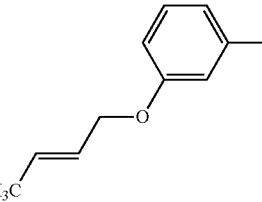
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :			
A.1.210	CH ₃	CH ₂ CH ₃	H
			
A.1.211	CH ₃	CH ₂ CH ₃	H
			
A.1.212	CH ₃	CH ₂ CH ₃	H
			
A.1.213	CH ₃	CH ₂ CH ₃	H
			
A.1.214	CH ₃	CH ₂ CH ₃	H
			
A.1.215	CH ₃	CH ₂ CH ₃	H
			

TABLE A-continued

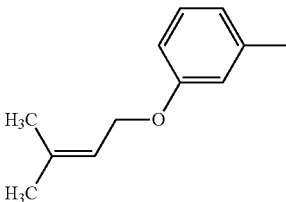
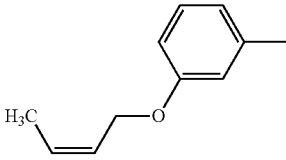
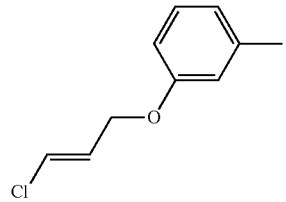
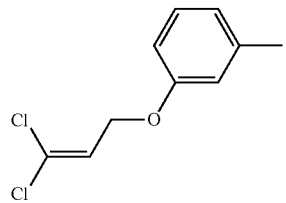
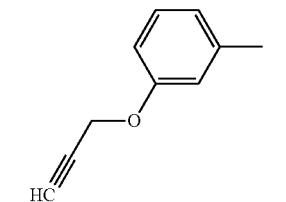
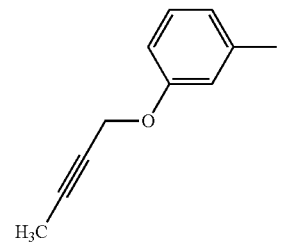
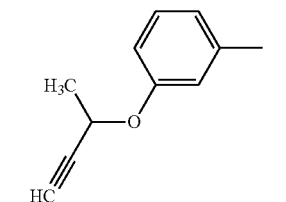
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.216	CH ₃	CH ₂ CH ₃	H	
A.1.217	CH ₃	CH ₂ CH ₃	H	
A.1.218	CH ₃	CH ₂ CH ₃	H	
A.1.219	CH ₃	CH ₂ CH ₃	H	
A.1.220	CH ₃	CH ₂ CH ₃	H	
A.1.221	CH ₃	CH ₂ CH ₃	H	
A.1.222	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

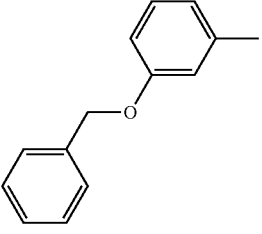
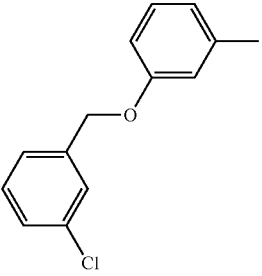
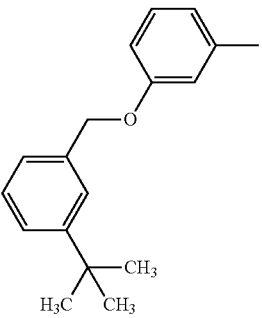
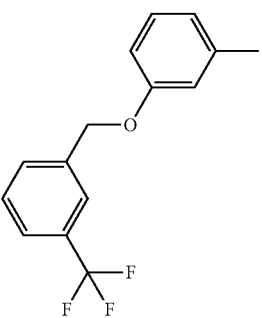
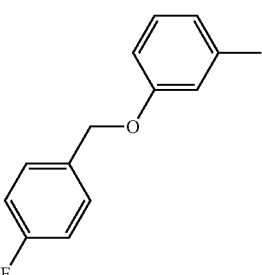
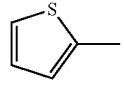
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :			
A.1.223	CH ₃	CH ₂ CH ₃	H
			
A.1.224	CH ₃	CH ₂ CH ₃	H
			
A.1.225	CH ₃	CH ₂ CH ₃	H
			
A.1.226	CH ₃	CH ₂ CH ₃	H
			
A.1.227	CH ₃	CH ₂ CH ₃	H
			
A.1.228	CH ₃	CH ₂ CH ₃	H
			

TABLE A-continued

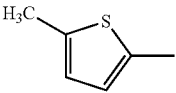
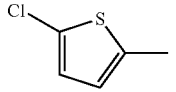
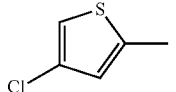
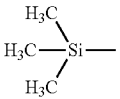
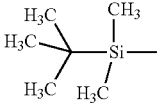
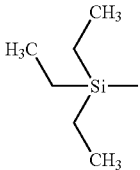
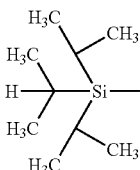
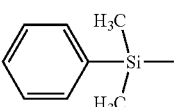
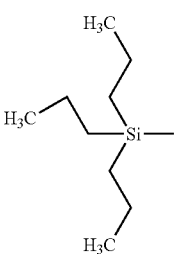
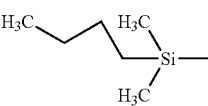
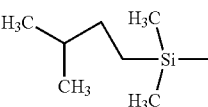
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.229	CH ₃	CH ₂ CH ₃	H	
A.1.230	CH ₃	CH ₂ CH ₃	H	
A.1.231	CH ₃	CH ₂ CH ₃	H	
A.1.232	CH ₃	CH ₂ CH ₃	H	H—
A.1.233	CH ₃	CH ₂ CH ₃	H	
A.1.234	CH ₃	CH ₂ CH ₃	H	
A.1.235	CH ₃	CH ₂ CH ₃	H	
A.1.236	CH ₃	CH ₂ CH ₃	H	
A.1.237	CH ₃	CH ₂ CH ₃	H	
A.1.238	CH ₃	CH ₂ CH ₃	H	
A.1.239	CH ₃	CH ₂ CH ₃	H	
A.1.240	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

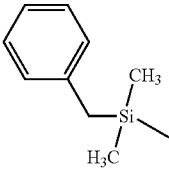
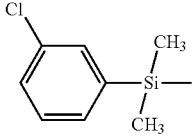
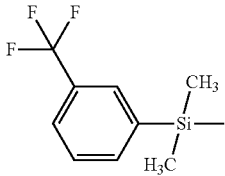
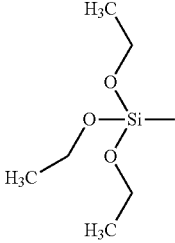

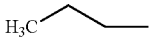
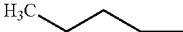
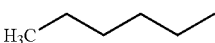
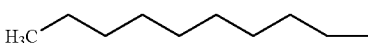
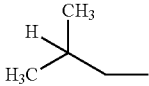
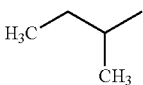
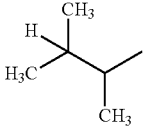
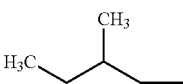
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.241	CH ₃	CH ₂ CH ₃	H	
A.1.242	CH ₃	CH ₂ CH ₃	H	
A.1.243	CH ₃	CH ₂ CH ₃	H	
A.1.244	CH ₃	CH ₂ CH ₃	H	
A.1.245	CH ₃	CH ₂ CH ₃	H	H ₃ C—
A.1.246	CH ₃	CH ₂ CH ₃	H	
A.1.247	CH ₃	CH ₂ CH ₃	H	
A.1.248	CH ₃	CH ₂ CH ₃	H	
A.1.249	CH ₃	CH ₂ CH ₃	H	
A.1.250	CH ₃	CH ₂ CH ₃	H	
A.1.251	CH ₃	CH ₂ CH ₃	H	
A.1.252	CH ₃	CH ₂ CH ₃	H	
A.1.253	CH ₃	CH ₂ CH ₃	H	
A.1.254	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.255	CH ₃	CH ₂ CH ₃	H	
A.1.256	CH ₃	CH ₂ CH ₃	H	
A.1.257	CH ₃	CH ₂ CH ₃	H	
A.1.258	CH ₃	CH ₂ CH ₃	H	
A.1.259	CH ₃	CH ₂ CH ₃	H	
A.1.260	CH ₃	CH ₂ CH ₃	H	
A.1.261	CH ₃	CH ₂ CH ₃	H	
A.1.262	CH ₃	CH ₂ CH ₃	H	
A.1.263	CH ₃	CH ₂ CH ₃	H	
A.1.264	CH ₃	CH ₂ CH ₃	H	
A.1.265	CH ₃	CH ₂ CH ₃	H	
A.1.266	CH ₃	CH ₂ CH ₃	H	
A.1.267	CH ₃	CH ₂ CH ₃	H	
A.1.268	CH ₃	CH ₂ CH ₃	H	
A.1.269	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

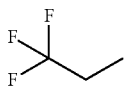
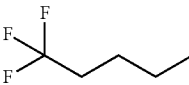
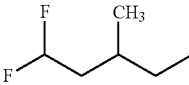

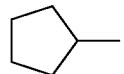
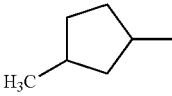
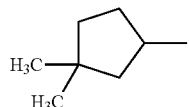
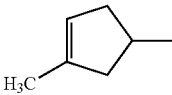
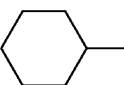
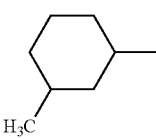
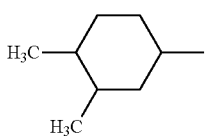
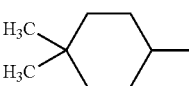
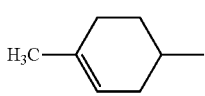
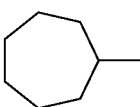
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.270	CH ₃	CH ₂ CH ₃	H	
A.1.271	CH ₃	CH ₂ CH ₃	H	
A.1.272	CH ₃	CH ₂ CH ₃	H	
A.1.273	CH ₃	CH ₂ CH ₃	H	
A.1.274	CH ₃	CH ₂ CH ₃	H	
A.1.275	CH ₃	CH ₂ CH ₃	H	
A.1.276	CH ₃	CH ₂ CH ₃	H	
A.1.277	CH ₃	CH ₂ CH ₃	H	
A.1.278	CH ₃	CH ₂ CH ₃	H	
A.1.279	CH ₃	CH ₂ CH ₃	H	
A.1.280	CH ₃	CH ₂ CH ₃	H	
A.1.281	CH ₃	CH ₂ CH ₃	H	
A.1.282	CH ₃	CH ₂ CH ₃	H	
A.1.283	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

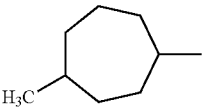
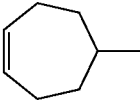
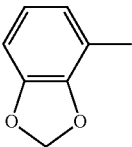
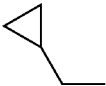
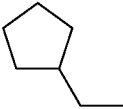
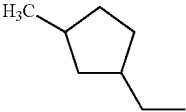
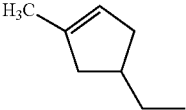
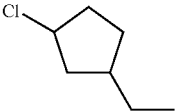
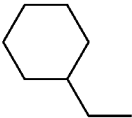
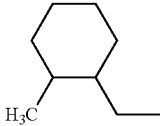
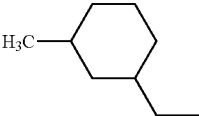
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.284	CH ₃	CH ₂ CH ₃	H	
A.1.285	CH ₃	CH ₂ CH ₃	H	
A.1.286	CH ₃	CH ₂ CH ₃	H	
A.1.287	CH ₃	CH ₂ CH ₃	H	
A.1.288	CH ₃	CH ₂ CH ₃	H	
A.1.289	CH ₃	CH ₂ CH ₃	H	
A.1.290	CH ₃	CH ₂ CH ₃	H	
A.1.291	CH ₃	CH ₂ CH ₃	H	
A.1.292	CH ₃	CH ₂ CH ₃	H	
A.1.293	CH ₃	CH ₂ CH ₃	H	
A.1.294	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

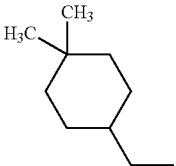
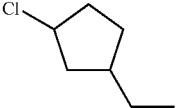
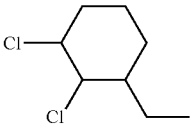
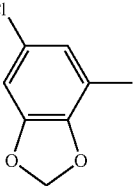
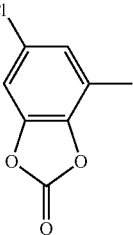
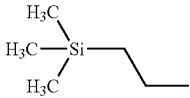
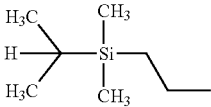
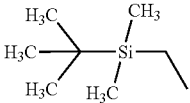
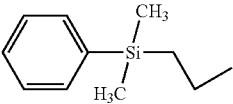
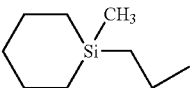
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.295	CH ₃	CH ₂ CH ₃	H	
A.1.296	CH ₃	CH ₂ CH ₃	H	
A.1.297	CH ₃	CH ₂ CH ₃	H	
A.1.298	CH ₃	CH ₂ CH ₃	H	
A.1.299	CH ₃	CH ₂ CH ₃	H	
A.1.300	CH ₃	CH ₂ CH ₃	H	
A.1.301	CH ₃	CH ₂ CH ₃	H	
A.1.302	CH ₃	CH ₂ CH ₃	H	
A.1.303	CH ₃	CH ₂ CH ₃	H	
A.1.304	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

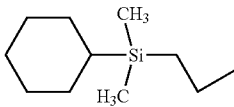
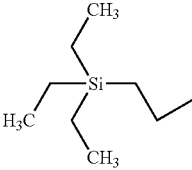
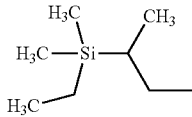
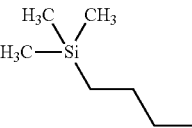
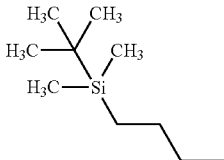
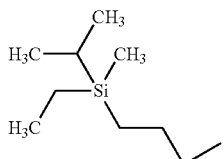
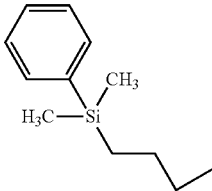
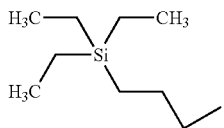
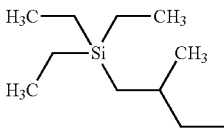
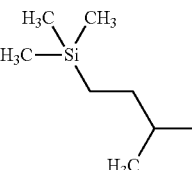
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.305	CH ₃	CH ₂ CH ₃	H	
A.1.306	CH ₃	CH ₂ CH ₃	H	
A.1.307	CH ₃	CH ₂ CH ₃	H	
A.1.308	CH ₃	CH ₂ CH ₃	H	
A.1.309	CH ₃	CH ₂ CH ₃	H	
A.1.310	CH ₃	CH ₂ CH ₃	H	
A.1.311	CH ₃	CH ₂ CH ₃	H	
A.1.312	CH ₃	CH ₂ CH ₃	H	
A.1.313	CH ₃	CH ₂ CH ₃	H	
A.1.314	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

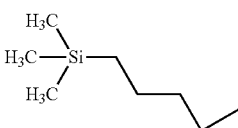
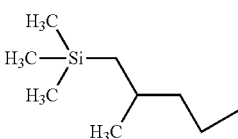
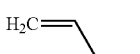
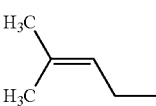
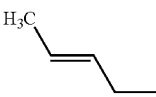
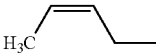
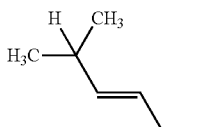
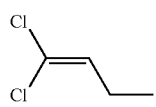
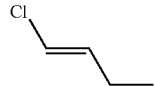
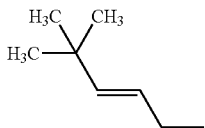
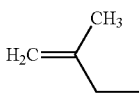
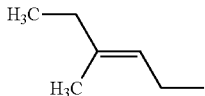
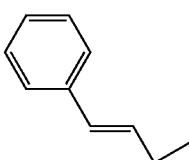
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.315	CH ₃	CH ₂ CH ₃	H	
A.1.316	CH ₃	CH ₂ CH ₃	H	
A.1.317	CH ₃	CH ₂ CH ₃	H	
A.1.318	CH ₃	CH ₂ CH ₃	H	
A.1.319	CH ₃	CH ₂ CH ₃	H	
A.1.320	CH ₃	CH ₂ CH ₃	H	
A.1.321	CH ₃	CH ₂ CH ₃	H	
A.1.322	CH ₃	CH ₂ CH ₃	H	
A.1.323	CH ₃	CH ₂ CH ₃	H	
A.1.324	CH ₃	CH ₂ CH ₃	H	
A.1.325	CH ₃	CH ₂ CH ₃	H	
A.1.326	CH ₃	CH ₂ CH ₃	H	
A.1.327	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

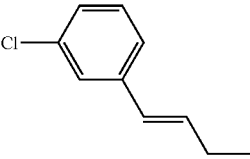
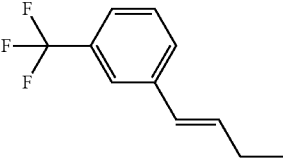
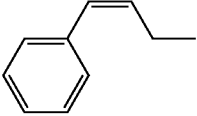
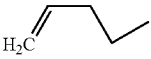
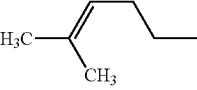
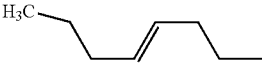
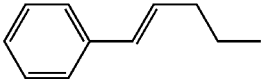
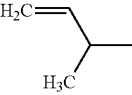
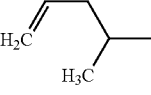
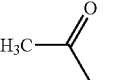
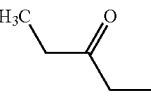
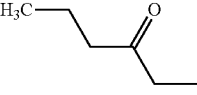
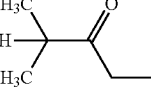
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.328	CH ₃	CH ₂ CH ₃	H	
A.1.329	CH ₃	CH ₂ CH ₃	H	
A.1.330	CH ₃	CH ₂ CH ₃	H	
A.1.331	CH ₃	CH ₂ CH ₃	H	
A.1.332	CH ₃	CH ₂ CH ₃	H	
A.1.333	CH ₃	CH ₂ CH ₃	H	
A.1.334	CH ₃	CH ₂ CH ₃	H	
A.1.335	CH ₃	CH ₂ CH ₃	H	
A.1.336	CH ₃	CH ₂ CH ₃	H	
A.1.337	CH ₃	CH ₂ CH ₃	H	
A.1.338	CH ₃	CH ₂ CH ₃	H	
A.1.339	CH ₃	CH ₂ CH ₃	H	
A.1.340	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

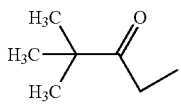
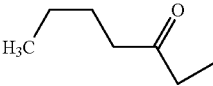
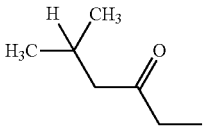
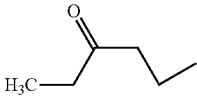
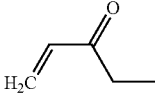
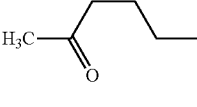
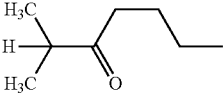
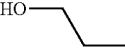
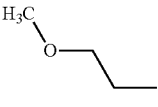
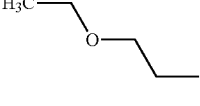
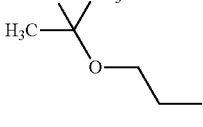
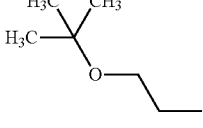
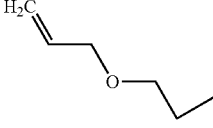
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.341	CH ₃	CH ₂ CH ₃	H	
A.1.342	CH ₃	CH ₂ CH ₃	H	
A.1.343	CH ₃	CH ₂ CH ₃	H	
A.1.344	CH ₃	CH ₂ CH ₃	H	
A.1.345	CH ₃	CH ₂ CH ₃	H	
A.1.346	CH ₃	CH ₂ CH ₃	H	
A.1.347	CH ₃	CH ₂ CH ₃	H	
A.1.348	CH ₃	CH ₂ CH ₃	H	
A.1.349	CH ₃	CH ₂ CH ₃	H	
A.1.350	CH ₃	CH ₂ CH ₃	H	
A.1.351	CH ₃	CH ₂ CH ₃	H	
A.1.352	CH ₃	CH ₂ CH ₃	H	
A.1.353	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

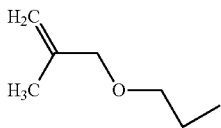
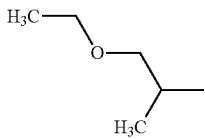
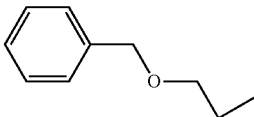
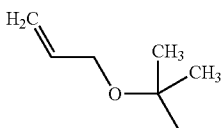
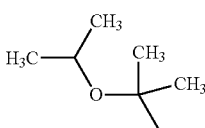
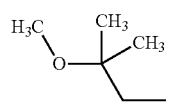
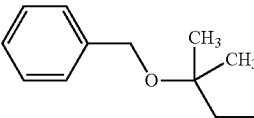
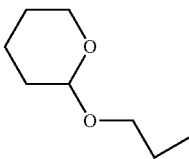
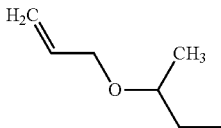
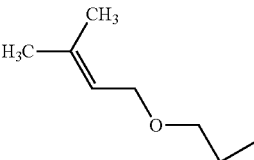
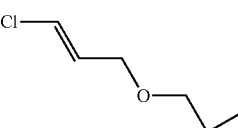
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.354	CH ₃	CH ₂ CH ₃	H	
A.1.355	CH ₃	CH ₂ CH ₃	H	
A.1.356	CH ₃	CH ₂ CH ₃	H	
A.1.357	CH ₃	CH ₂ CH ₃	H	
A.1.358	CH ₃	CH ₂ CH ₃	H	
A.1.359	CH ₃	CH ₂ CH ₃	H	
A.1.360	CH ₃	CH ₂ CH ₃	H	
A.1.361	CH ₃	CH ₂ CH ₃	H	
A.1.362	CH ₃	CH ₂ CH ₃	H	
A.1.363	CH ₃	CH ₂ CH ₃	H	
A.1.364	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

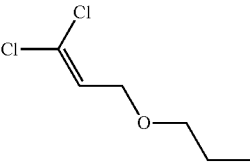
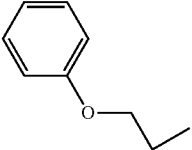
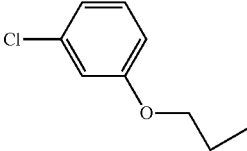
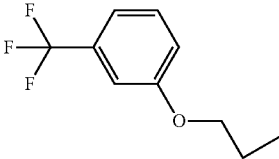
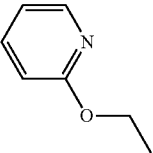
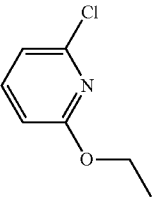
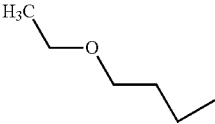
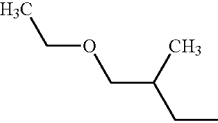
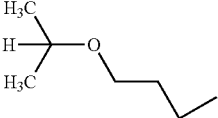
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.365	CH ₃	CH ₂ CH ₃	H	
A.1.366	CH ₃	CH ₂ CH ₃	H	
A.1.367	CH ₃	CH ₂ CH ₃	H	
A.1.368	CH ₃	CH ₂ CH ₃	H	
A.1.369	CH ₃	CH ₂ CH ₃	H	
A.1.370	CH ₃	CH ₂ CH ₃	H	
A.1.371	CH ₃	CH ₂ CH ₃	H	
A.1.372	CH ₃	CH ₂ CH ₃	H	
A.1.373	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

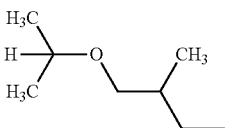
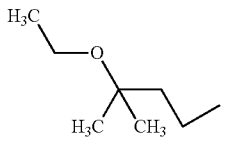
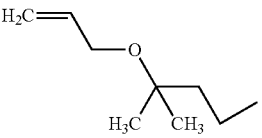
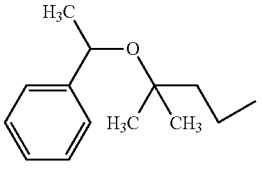
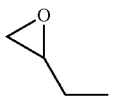
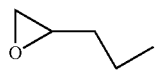
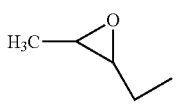
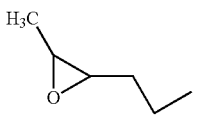
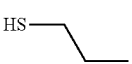
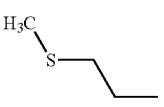
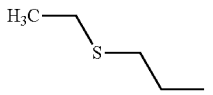
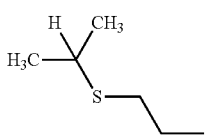
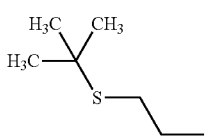
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.374	CH ₃	CH ₂ CH ₃	H	
A.1.375	CH ₃	CH ₂ CH ₃	H	
A.1.376	CH ₃	CH ₂ CH ₃	H	
A.1.377	CH ₃	CH ₂ CH ₃	H	
A.1.378	CH ₃	CH ₂ CH ₃	H	
A.1.379	CH ₃	CH ₂ CH ₃	H	
A.1.380	CH ₃	CH ₂ CH ₃	H	
A.1.381	CH ₃	CH ₂ CH ₃	H	
A.1.382	CH ₃	CH ₂ CH ₃	H	
A.1.383	CH ₃	CH ₂ CH ₃	H	
A.1.384	CH ₃	CH ₂ CH ₃	H	
A.1.385	CH ₃	CH ₂ CH ₃	H	
A.1.386	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.387	CH ₃	CH ₂ CH ₃	H	
A.1.388	CH ₃	CH ₂ CH ₃	H	
A.1.389	CH ₃	CH ₂ CH ₃	H	
A.1.390	CH ₃	CH ₂ CH ₃	H	
A.1.391	CH ₃	CH ₂ CH ₃	H	
A.1.392	CH ₃	CH ₂ CH ₃	H	
A.1.393	CH ₃	CH ₂ CH ₃	H	
A.1.394	CH ₃	CH ₂ CH ₃	H	
A.1.395	CH ₃	CH ₂ CH ₃	H	
A.1.396	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

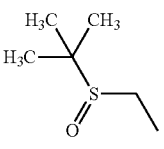
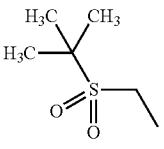
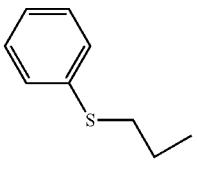
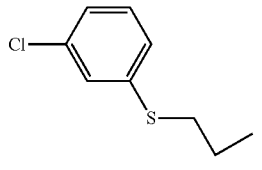
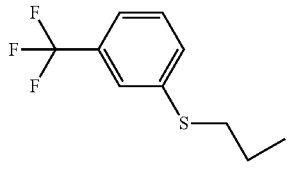
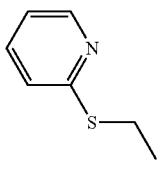
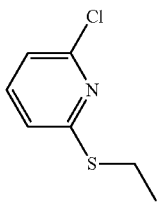
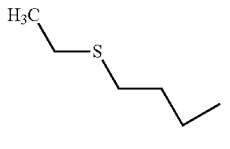
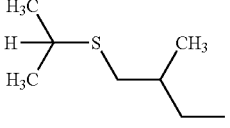
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.397	CH ₃	CH ₂ CH ₃	H	
A.1.398	CH ₃	CH ₂ CH ₃	H	
A.1.399	CH ₃	CH ₂ CH ₃	H	
A.1.400	CH ₃	CH ₂ CH ₃	H	
A.1.401	CH ₃	CH ₂ CH ₃	H	
A.1.402	CH ₃	CH ₂ CH ₃	H	
A.1.403	CH ₃	CH ₂ CH ₃	H	
A.1.404	CH ₃	CH ₂ CH ₃	H	
A.1.405	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.406	CH ₃	CH ₂ CH ₃	H	
A.1.407	CH ₃	CH ₂ CH ₃	H	
A.1.408	CH ₃	CH ₂ CH ₃	H	
A.1.409	CH ₃	CH ₂ CH ₃	H	
A.1.410	CH ₃	CH ₂ CH ₃	H	
A.1.411	CH ₃	CH ₂ CH ₃	H	
A.1.412	CH ₃	CH ₂ CH ₃	H	
A.1.413	CH ₃	CH ₂ CH ₃	H	
A.1.414	CH ₃	CH ₂ CH ₃	H	
A.1.415	CH ₃	CH ₂ CH ₃	H	
A.1.416	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

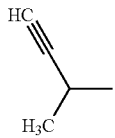
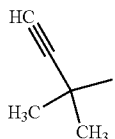
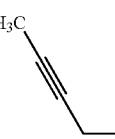
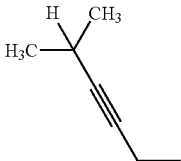
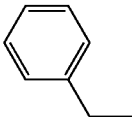
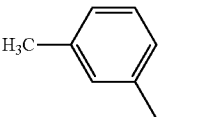
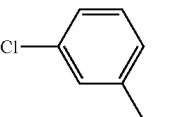
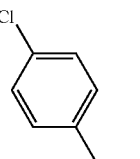
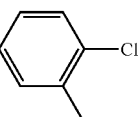
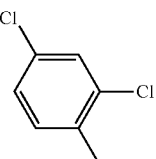
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.417	CH ₃	CH ₂ CH ₃	H	
A.1.418	CH ₃	CH ₂ CH ₃	H	
A.1.419	CH ₃	CH ₂ CH ₃	H	
A.1.420	CH ₃	CH ₂ CH ₃	H	
A.1.421	CH ₃	CH ₂ CH ₃	H	
A.1.422	CH ₃	CH ₂ CH ₃	H	
A.1.423	CH ₃	CH ₂ CH ₃	H	
A.1.424	CH ₃	CH ₂ CH ₃	H	
A.1.425	CH ₃	CH ₂ CH ₃	H	
A.1.426	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

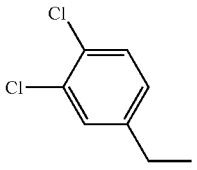
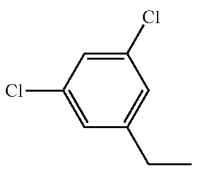
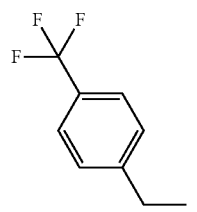
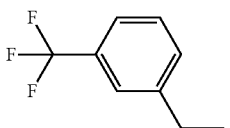
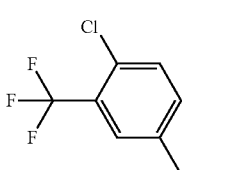
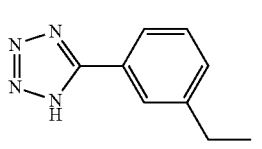
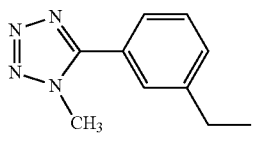
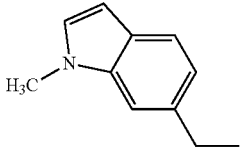
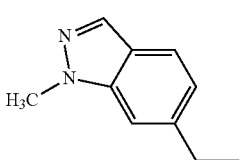
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.427	CH ₃	CH ₂ CH ₃	H	
A.1.428	CH ₃	CH ₂ CH ₃	H	
A.1.429	CH ₃	CH ₂ CH ₃	H	
A.1.430	CH ₃	CH ₂ CH ₃	H	
A.1.431	CH ₃	CH ₂ CH ₃	H	
A.1.432	CH ₃	CH ₂ CH ₃	H	
A.1.433	CH ₃	CH ₂ CH ₃	H	
A.1.434	CH ₃	CH ₂ CH ₃	H	
A.1.435	CH ₃	CH ₂ CH ₃	H	

TABLE A-continued

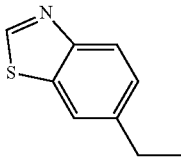
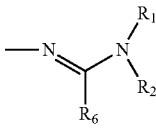
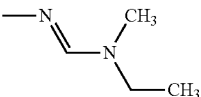
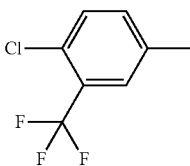
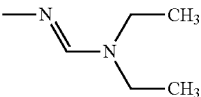
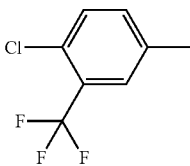
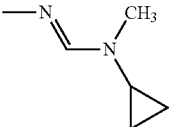
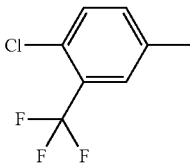
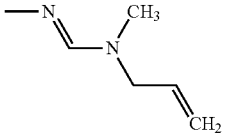
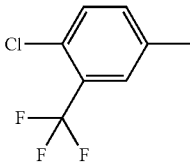
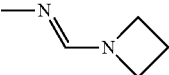
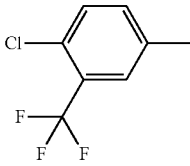
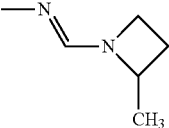
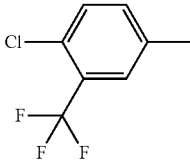
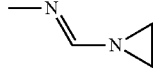
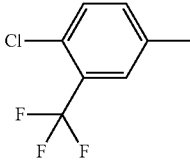
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :				
A.1.436	CH ₃	CH ₂ CH ₃	H	
				
Line				
A.1.437				
A.1.438				
A.1.439				
A.1.440				
A.1.441				
A.1.442				
A.1.443				

TABLE A-continued

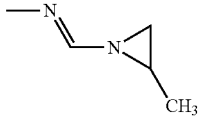
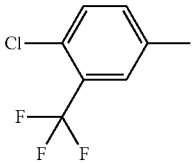
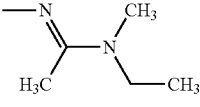
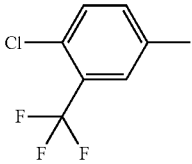
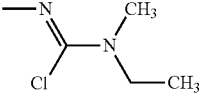
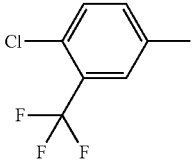
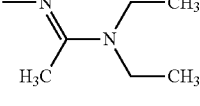
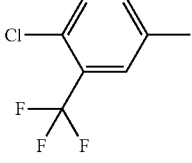
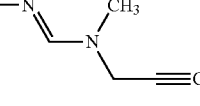
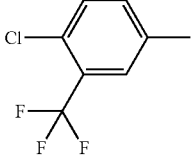
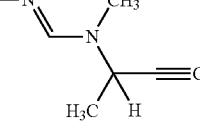
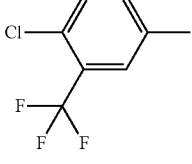
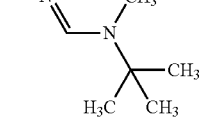
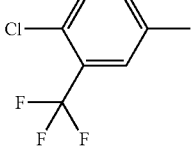
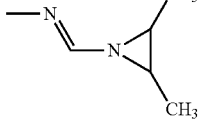
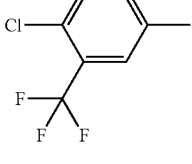
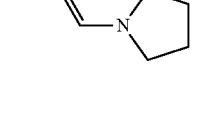
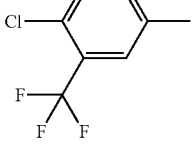
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.444		
A.1.445		
A.1.446		
A.1.447		
A.1.448		
A.1.449		
A.1.450		
A.1.451		
A.1.452		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

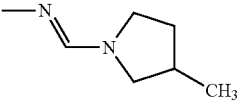
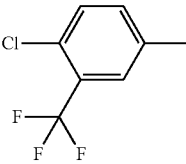
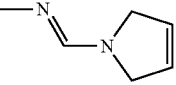
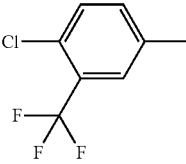
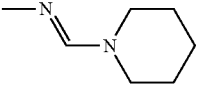
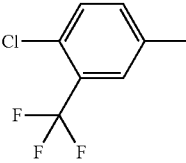
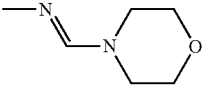
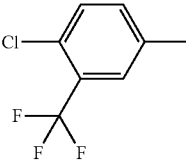
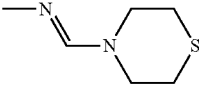
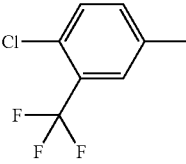
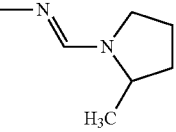
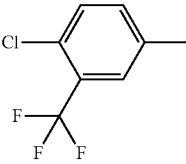
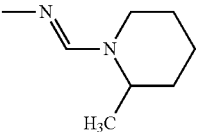
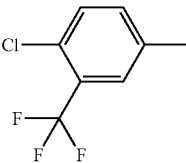
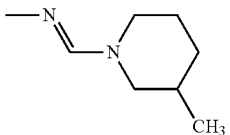
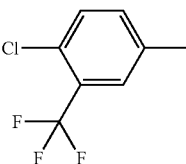
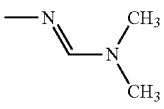
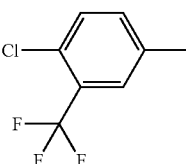
A.1.453		
A.1.454		
A.1.455		
A.1.456		
A.1.457		
A.1.458		
A.1.459		
A.1.460		
A.1.461		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

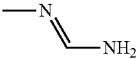
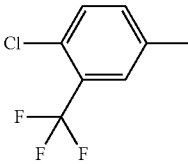
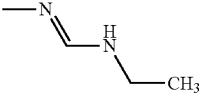
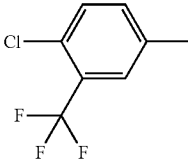
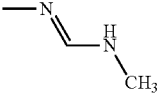
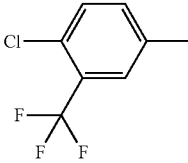
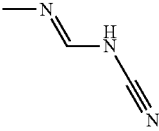
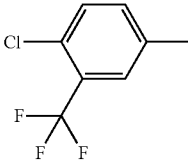
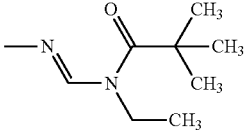
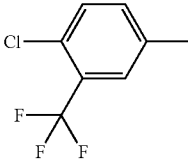
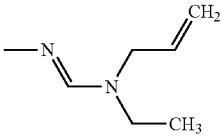
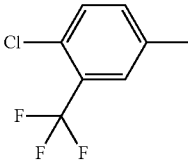
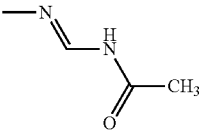
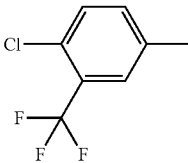
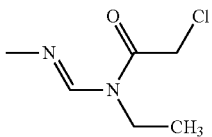
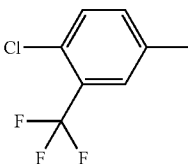
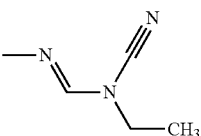
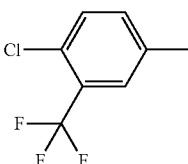
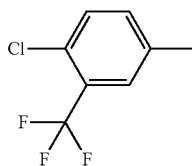
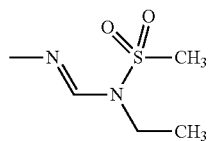
A.1.462		
A.1.463		
A.1.464		
A.1.465		
A.1.466		
A.1.467		
A.1.468		
A.1.469		
A.1.470		

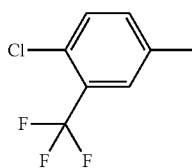
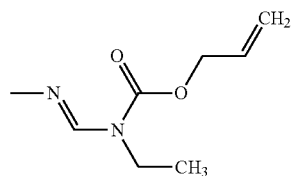
TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

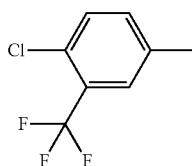
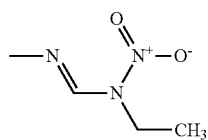
A.1.471



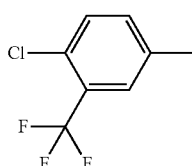
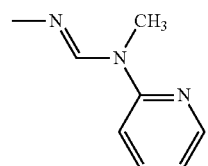
A.1.472



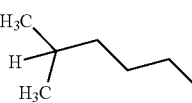
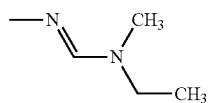
A.1.473



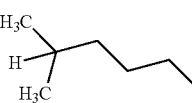
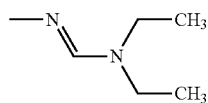
A.1.474



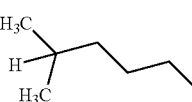
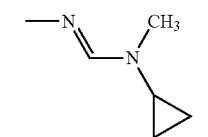
A.1.475



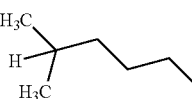
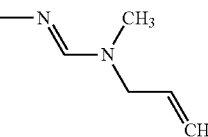
A.1.476



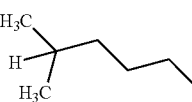
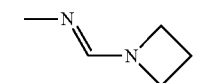
A.1.477



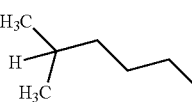
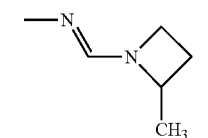
A.1.478



A.1.479



A.1.480



A.1.481

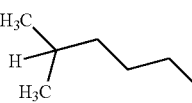
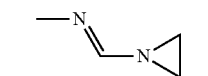


TABLE A-continued

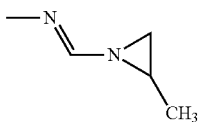
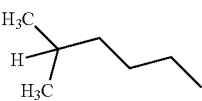
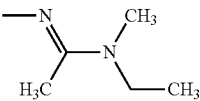
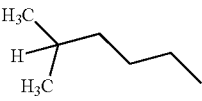
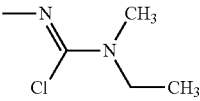
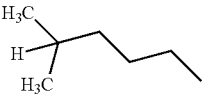
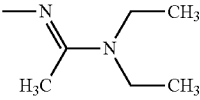
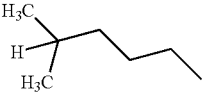
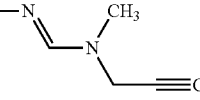
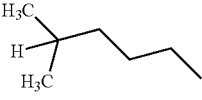
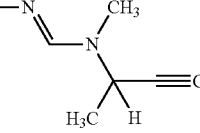
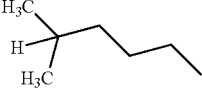
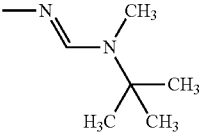
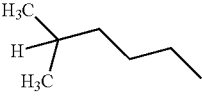
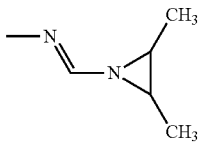
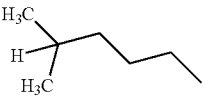
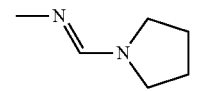
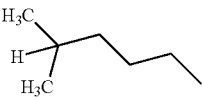
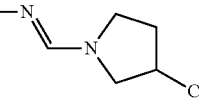
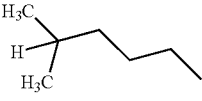
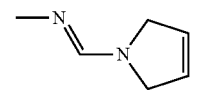
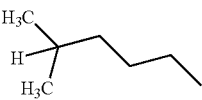
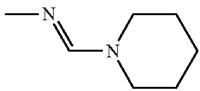
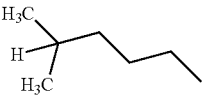
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.482		
A.1.483		
A.1.484		
A.1.485		
A.1.486		
A.1.487		
A.1.488		
A.1.489		
A.1.490		
A.1.491		
A.1.492		
A.1.493		

TABLE A-continued

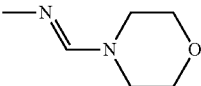
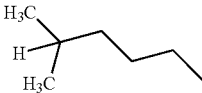
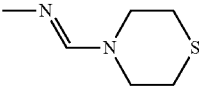
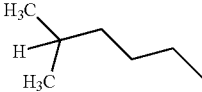
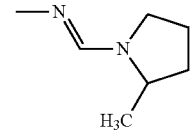
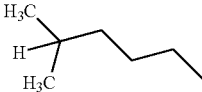
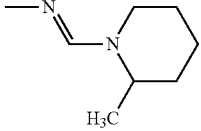
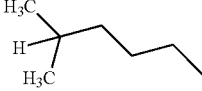
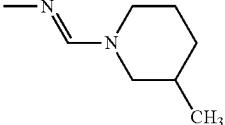
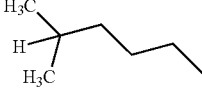
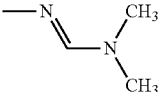
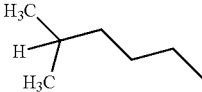
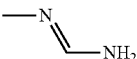
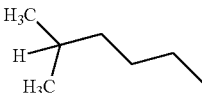
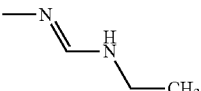
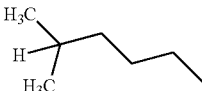
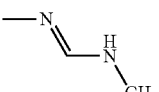
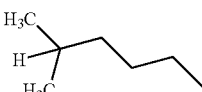
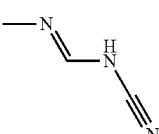
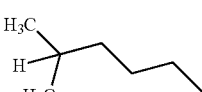
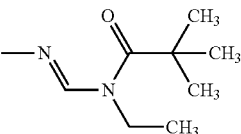
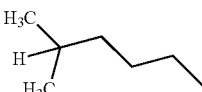
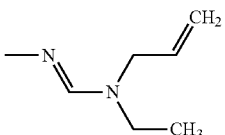
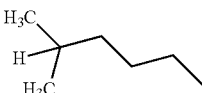
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.494		
A.1.495		
A.1.496		
A.1.497		
A.1.498		
A.1.499		
A.1.500		
A.1.501		
A.1.502		
A.1.503		
A.1.504		
A.1.505		

TABLE A-continued

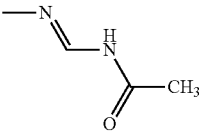
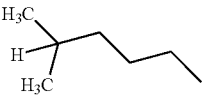
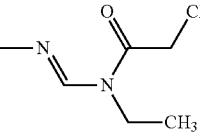
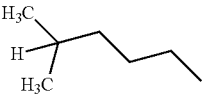
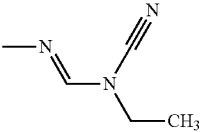
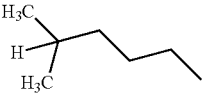
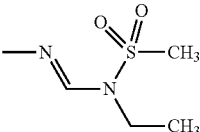
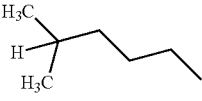
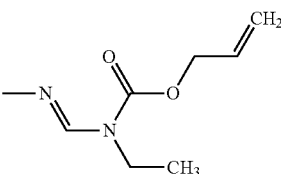
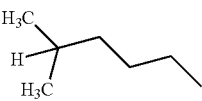
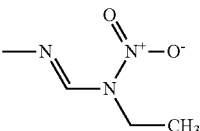
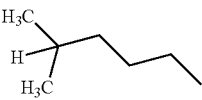
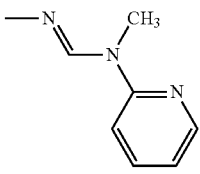
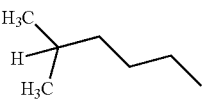
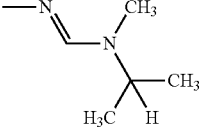
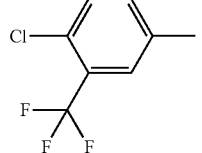
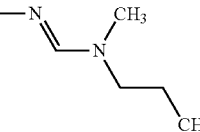
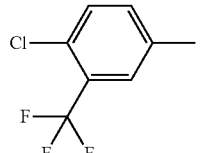
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.506		
A.1.507		
A.1.508		
A.1.509		
A.1.510		
A.1.511		
A.1.512		
A.1.513		
A.1.514		

TABLE A-continued

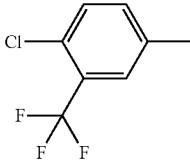
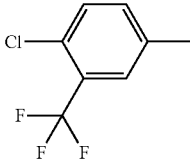
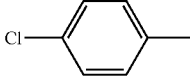
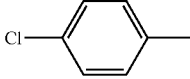
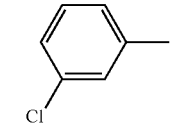
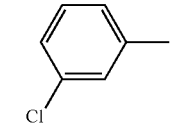
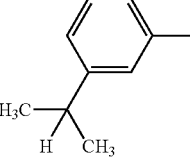
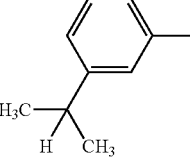
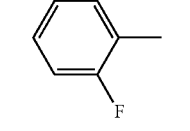
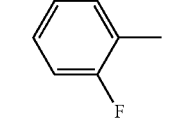
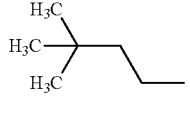
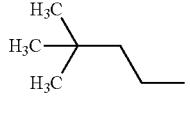
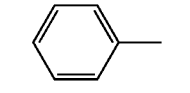
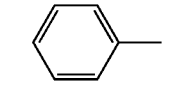
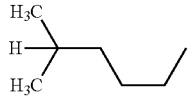
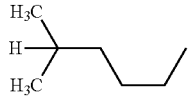
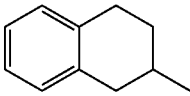
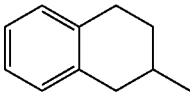
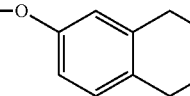
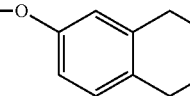
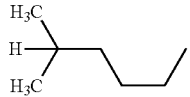
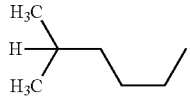
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.515		
A.1.516		
A.1.517		
A.1.518		
A.1.519		
A.1.520		
A.1.521		
A.1.522		
A.1.523		
A.1.524		
A.1.525		

TABLE A-continued

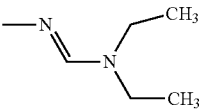
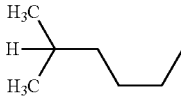
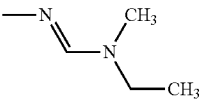
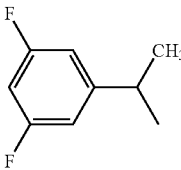
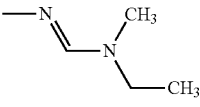
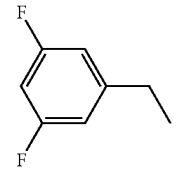
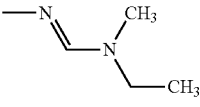
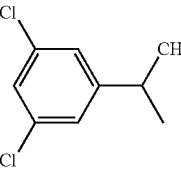
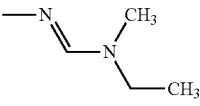
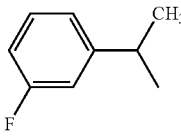
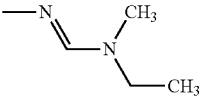
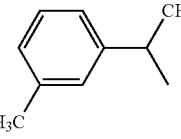
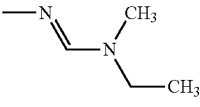
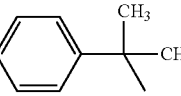
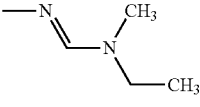
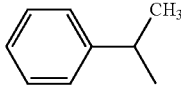
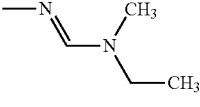
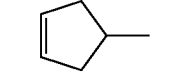
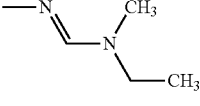
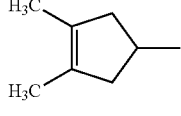
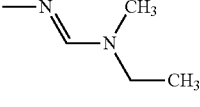
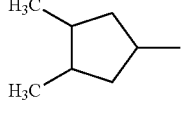
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.526		
A.1.527		
A.1.528		
A.1.529		
A.1.530		
A.1.531		
A.1.532		
A.1.533		
A.1.534		
A.1.535		
A.1.536		

TABLE A-continued

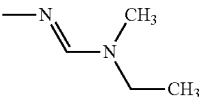
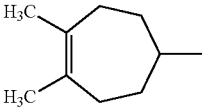
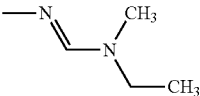
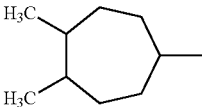
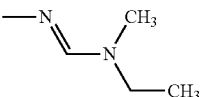
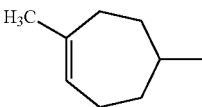
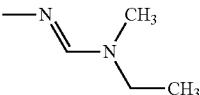
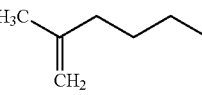
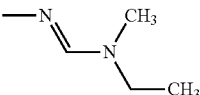
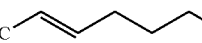
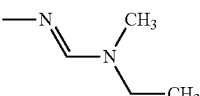
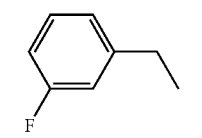
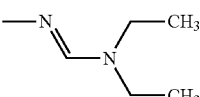
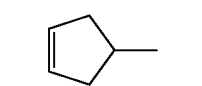
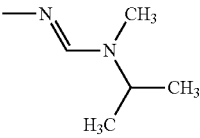
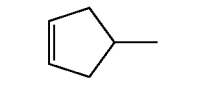
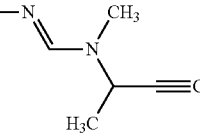
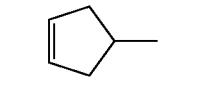
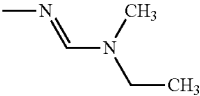
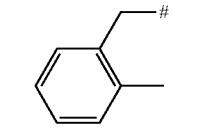
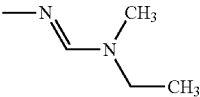
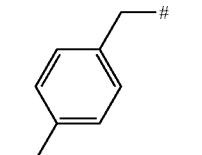
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.537		
A.1.538		
A.1.539		
A.1.540		
A.1.541		
A.1.542		
A.1.543		
A.1.544		
A.1.545		
A.1.546		
A.1.547		

TABLE A-continued

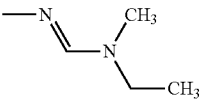
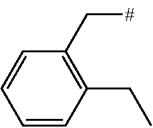
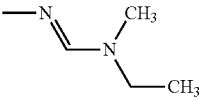
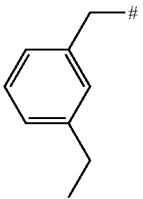
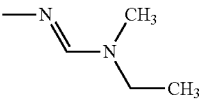
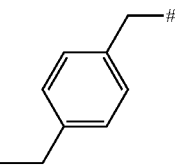
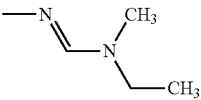
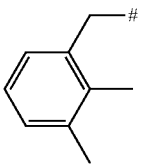
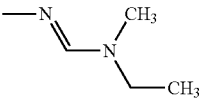
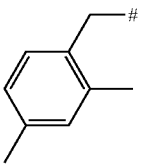
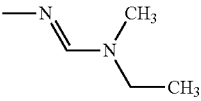
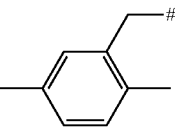
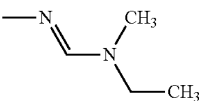
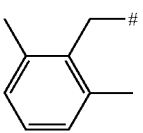
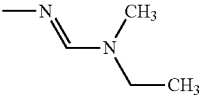
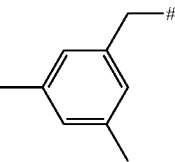
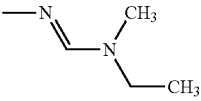
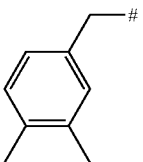
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.548		
A.1.549		
A.1.550		
A.1.551		
A.1.552		
A.1.553		
A.1.554		
A.1.555		
A.1.556		

TABLE A-continued

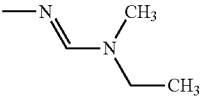
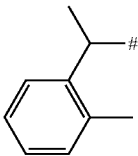
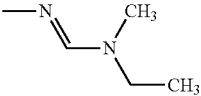
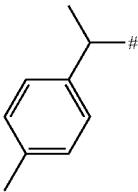
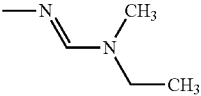
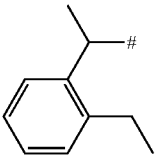
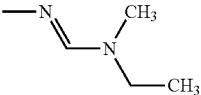
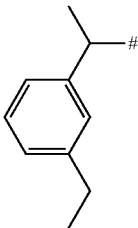
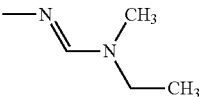
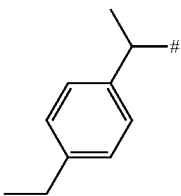
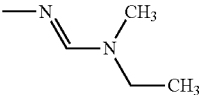
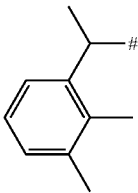
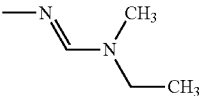
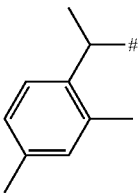
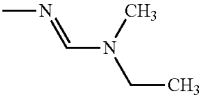
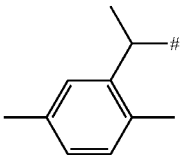
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.557		
A.1.558		
A.1.559		
A.1.560		
A.1.561		
A.1.562		
A.1.563		
A.1.564		

TABLE A-continued

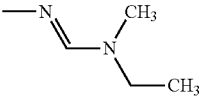
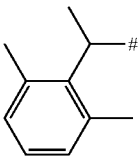
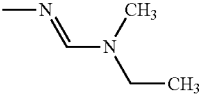
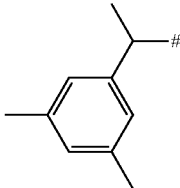
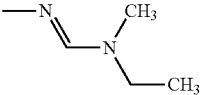
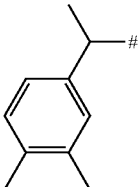
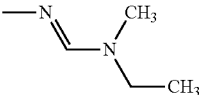
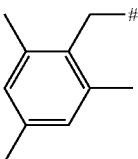
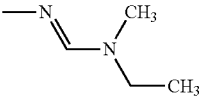
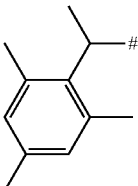
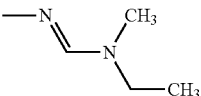
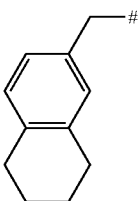
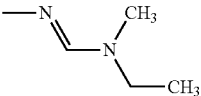
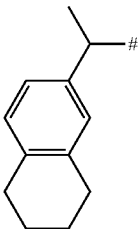
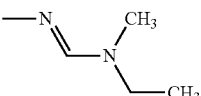
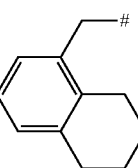
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.565		
A.1.566		
A.1.567		
A.1.568		
A.1.569		
A.1.570		
A.1.571		
A.1.572		

TABLE A-continued

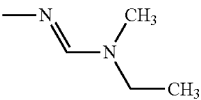
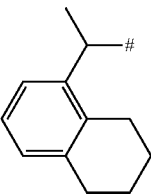
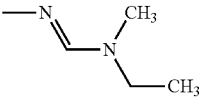
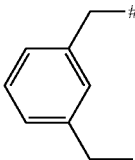
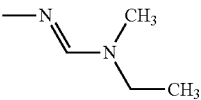
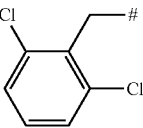
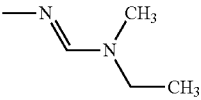
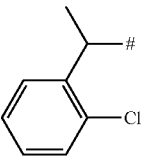
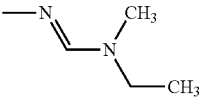
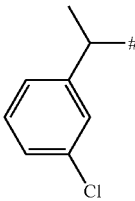
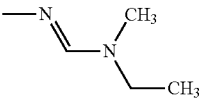
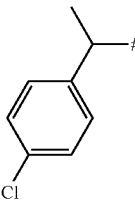
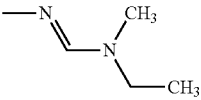
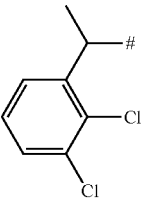
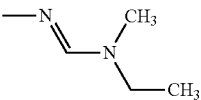
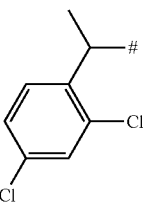
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.573		
A.1.574		
A.1.575		
A.1.576		
A.1.577		
A.1.578		
A.1.579		
A.1.580		

TABLE A-continued

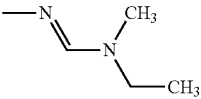
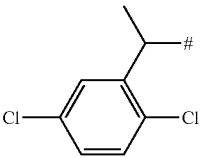
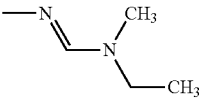
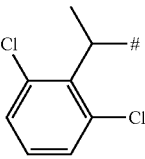
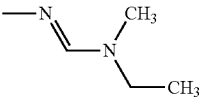
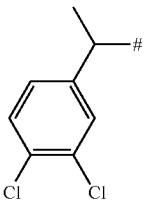
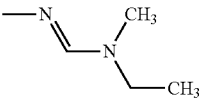
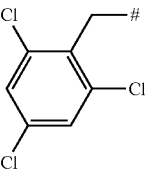
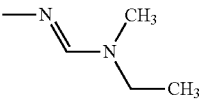
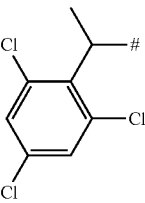
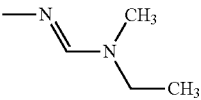
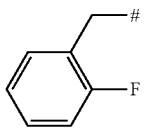
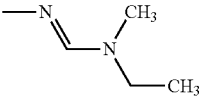
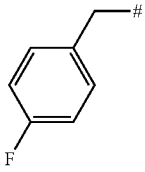
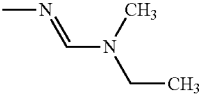
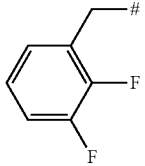
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.581		
A.1.582		
A.1.583		
A.1.584		
A.1.585		
A.1.586		
A.1.587		
A.1.588		

TABLE A-continued

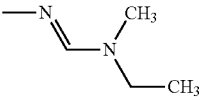
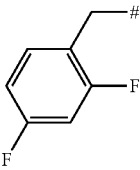
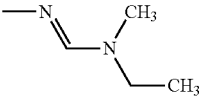
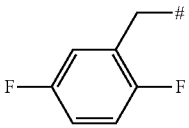
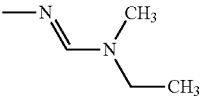
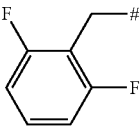
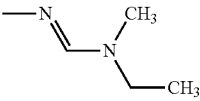
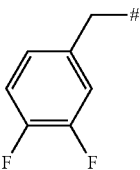
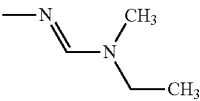
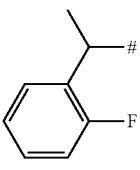
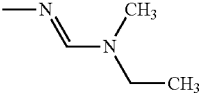
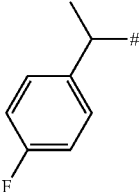
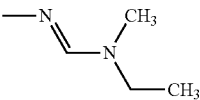
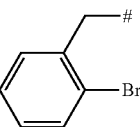
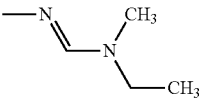
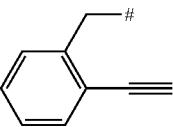
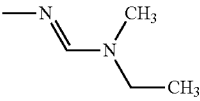
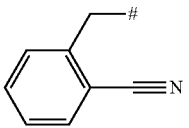
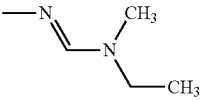
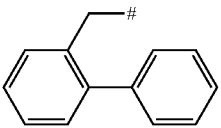
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.589		
A.1.590		
A.1.591		
A.1.592		
A.1.593		
A.1.594		
A.1.595		
A.1.596		
A.1.597		
A.1.598		

TABLE A-continued

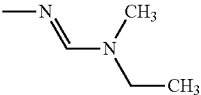
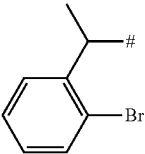
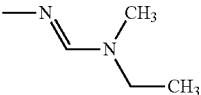
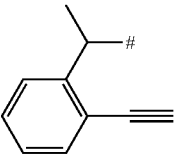
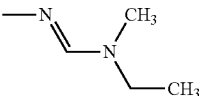
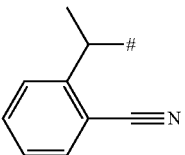
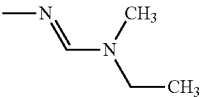
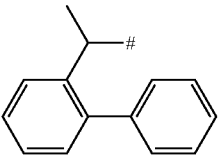
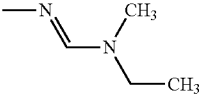
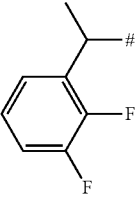
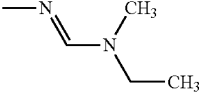
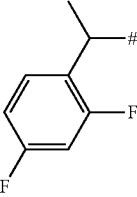
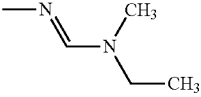
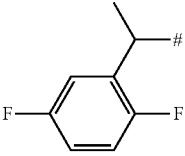
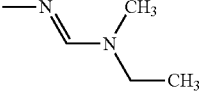
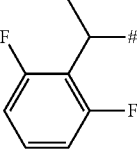
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.599		
A.1.600		
A.1.601		
A.1.602		
A.1.603		
A.1.604		
A.1.605		
A.1.606		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.607		
A.1.608		
A.1.609		
A.1.610		
A.1.611		
A.1.612		
A.1.613		
A.1.614		

TABLE A-continued

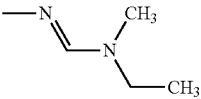
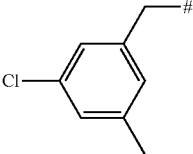
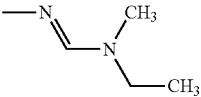
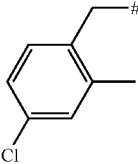
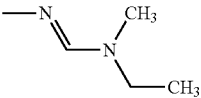
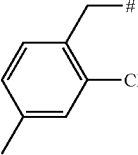
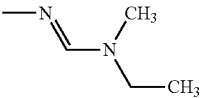
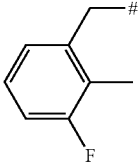
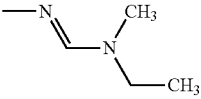
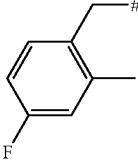
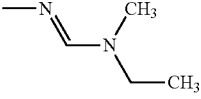
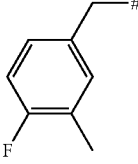
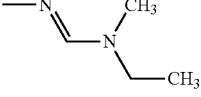
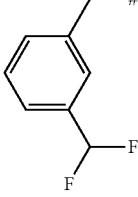
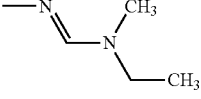
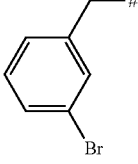
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.615		
A.1.616		
A.1.617		
A.1.618		
A.1.619		
A.1.620		
A.1.621		
A.1.622		

TABLE A-continued

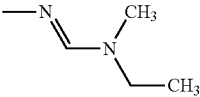
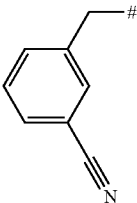
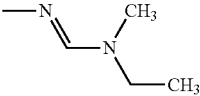
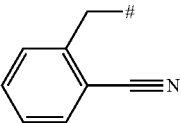
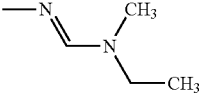
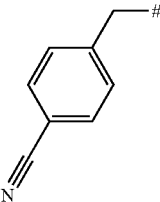
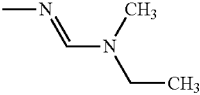
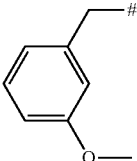
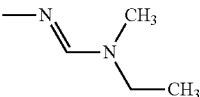
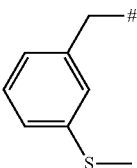
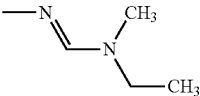
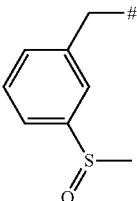
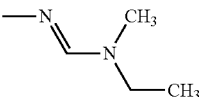
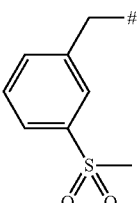
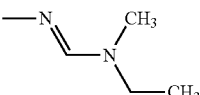
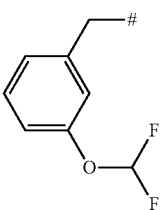
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.623		
A.1.624		
A.1.625		
A.1.626		
A.1.627		
A.1.628		
A.1.629		
A.1.630		

TABLE A-continued

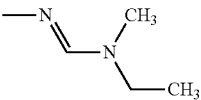
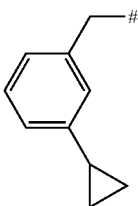
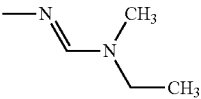
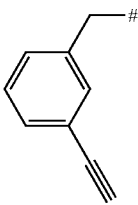
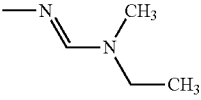
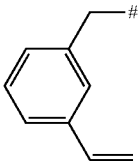
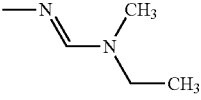
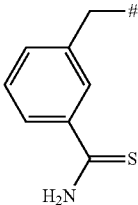
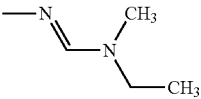
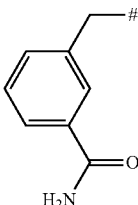
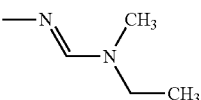
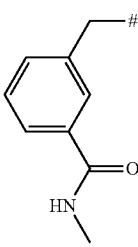
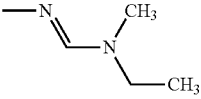
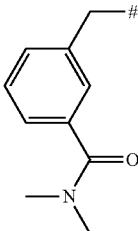
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.631		
A.1.632		
A.1.633		
A.1.634		
A.1.635		
A.1.636		
A.1.637		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

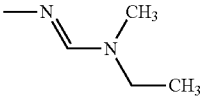
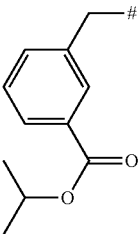
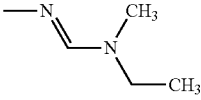
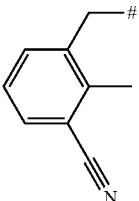
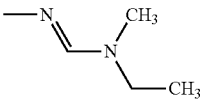
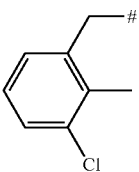
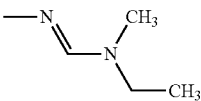
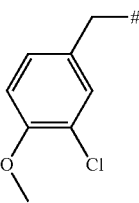
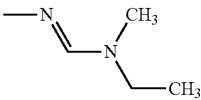
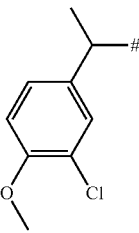
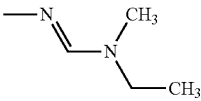
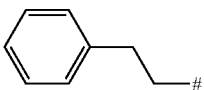
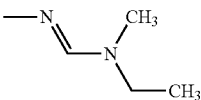
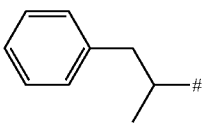
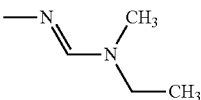
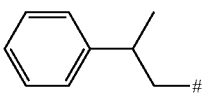
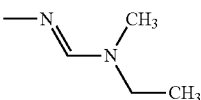
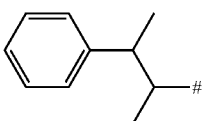
A.1.638		
A.1.639		
A.1.640		
A.1.641		
A.1.642		
A.1.643		
A.1.644		
A.1.645		
A.1.646		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

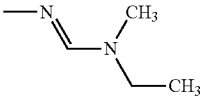
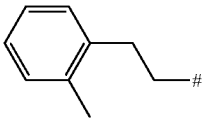
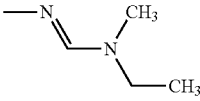
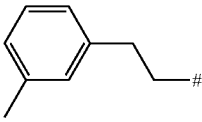
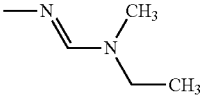
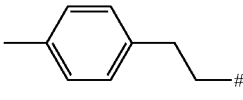
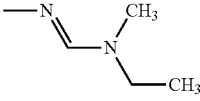
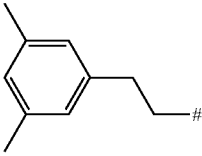
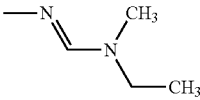
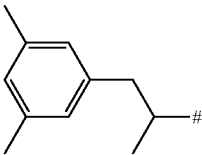
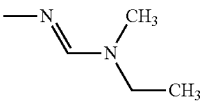
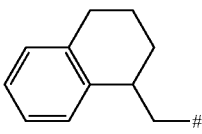
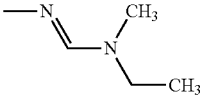
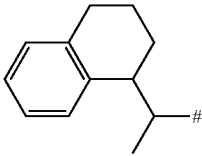
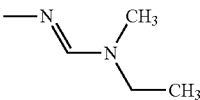
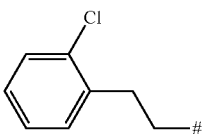
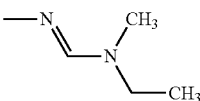
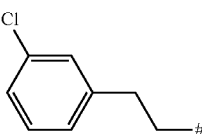
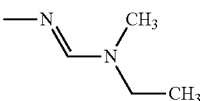
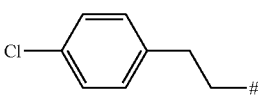
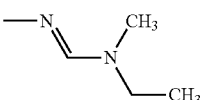
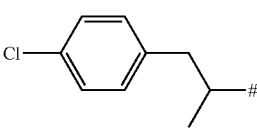
A.1.647		
A.1.648		
A.1.649		
A.1.650		
A.1.651		
A.1.652		
A.1.653		
A.1.654		
A.1.655		
A.1.656		
A.1.657		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.658		
A.1.659		
A.1.660		
A.1.661		
A.1.662		
A.1.663		
A.1.664		
A.1.665		
A.1.666		
A.1.667		

TABLE A-continued

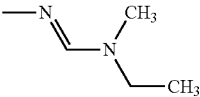
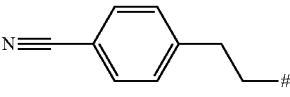
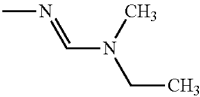
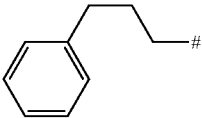
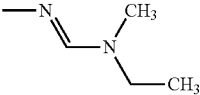
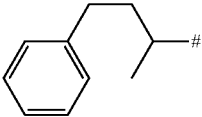
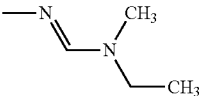
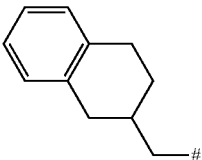
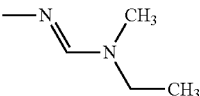
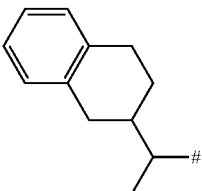
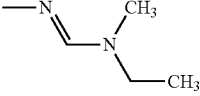
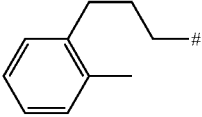
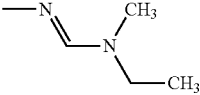
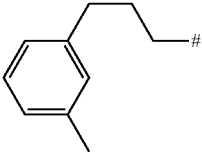
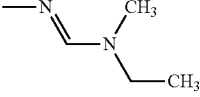
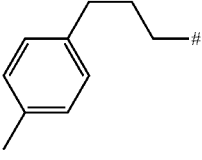
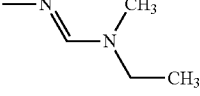
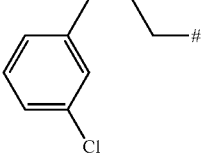
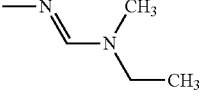
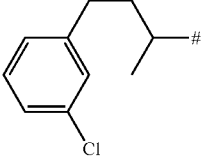
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.668		
A.1.669		
A.1.670		
A.1.671		
A.1.672		
A.1.673		
A.1.674		
A.1.675		
A.1.676		
A.1.677		

TABLE A-continued

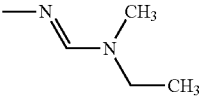
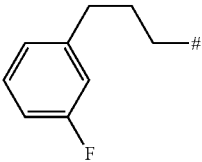
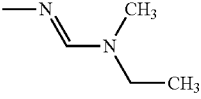
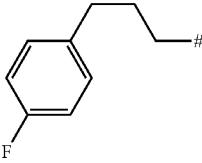
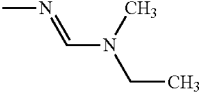
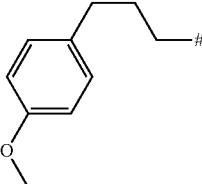
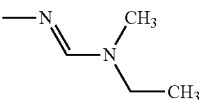
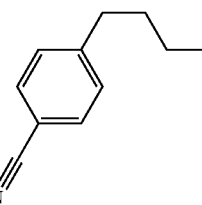
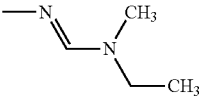
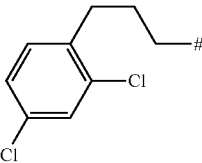
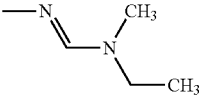
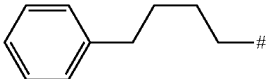
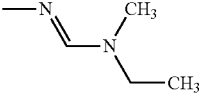
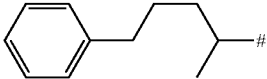
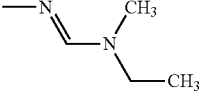
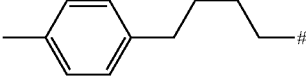
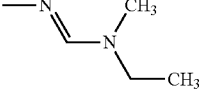
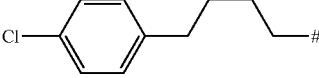
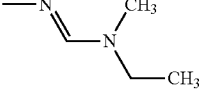
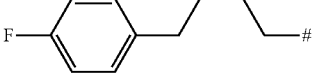
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.678		
A.1.679		
A.1.680		
A.1.681		
A.1.682		
A.1.683		
A.1.684		
A.1.685		
A.1.686		
A.1.687		

TABLE A-continued

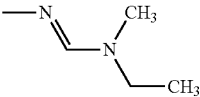
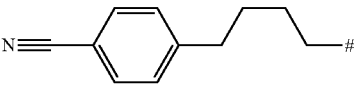
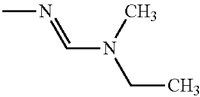
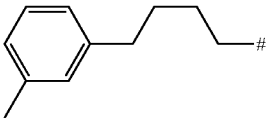
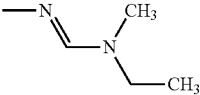
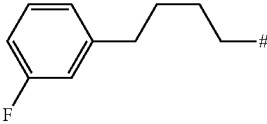
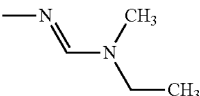
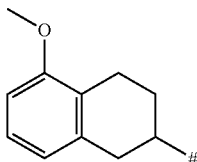
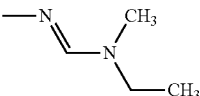
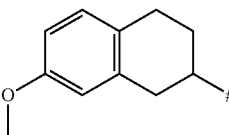
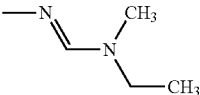
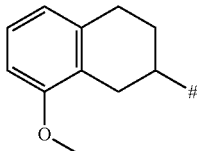
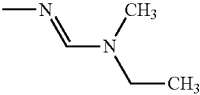
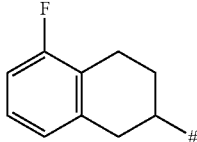
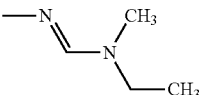
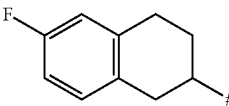
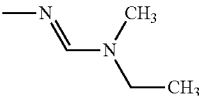
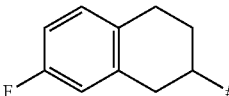
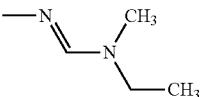
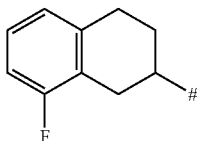
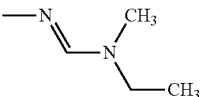
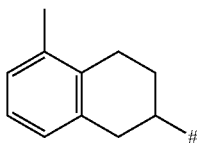
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.688		
A.1.689		
A.1.690		
A.1.691		
A.1.692		
A.1.693		
A.1.694		
A.1.695		
A.1.696		
A.1.697		
A.1.698		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

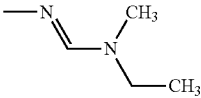
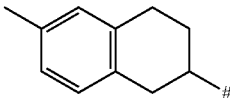
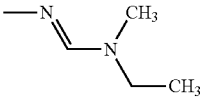
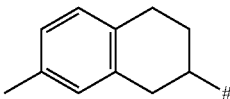
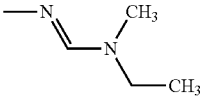
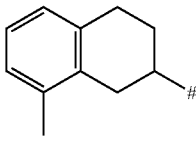
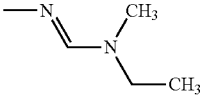
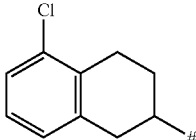
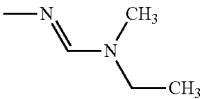
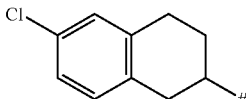
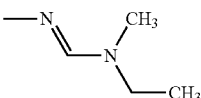
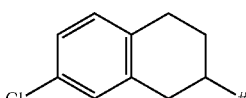
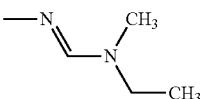
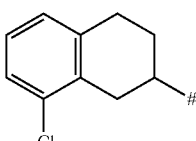
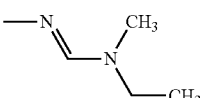
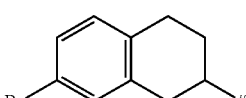
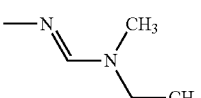
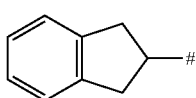
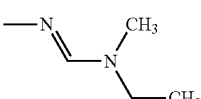
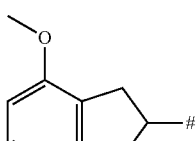
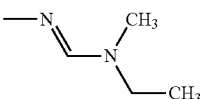
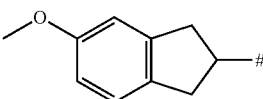
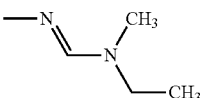
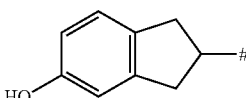
A.1.699		
A.1.700		
A.1.701		
A.1.702		
A.1.703		
A.1.704		
A.1.705		
A.1.706		
A.1.707		
A.1.708		
A.1.709		
A.1.710		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

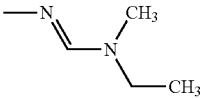
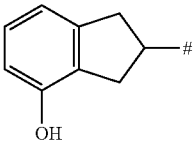
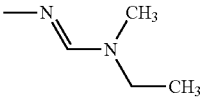
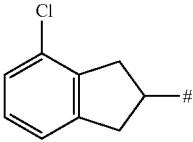
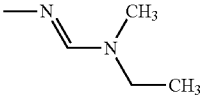
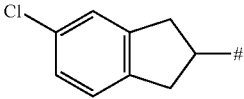
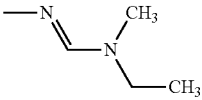
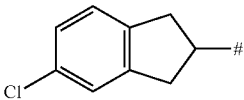
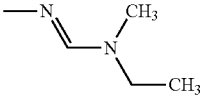
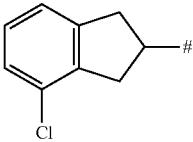
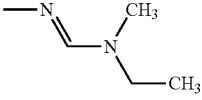
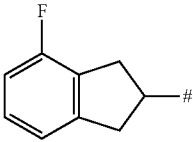
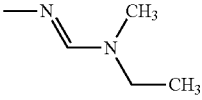
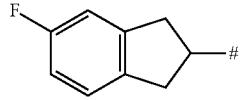
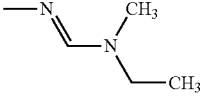
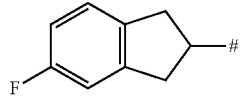
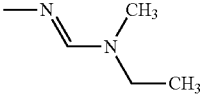
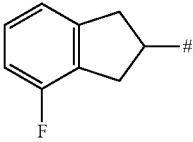
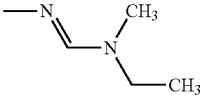
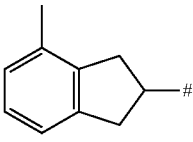
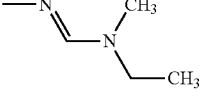
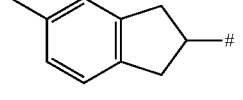
A.1.711		
A.1.712		
A.1.713		
A.1.714		
A.1.715		
A.1.716		
A.1.717		
A.1.718		
A.1.719		
A.1.720		
A.1.721		

TABLE A-continued

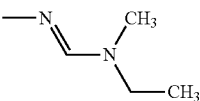
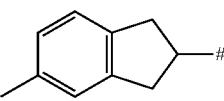
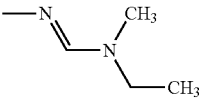
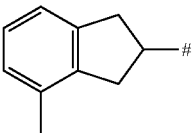
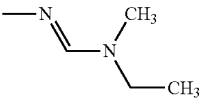
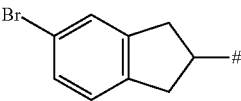
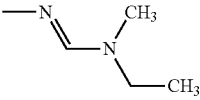
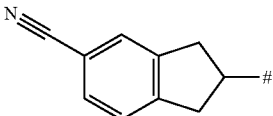
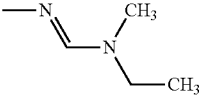
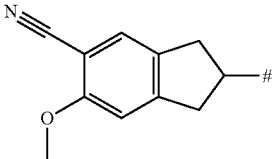
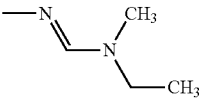
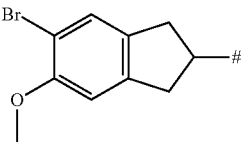
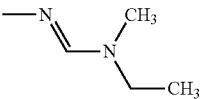
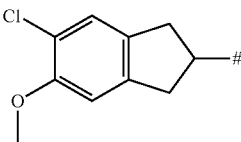
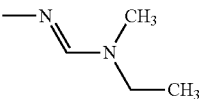
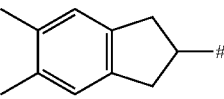
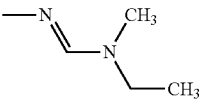
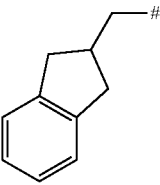
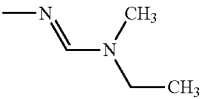
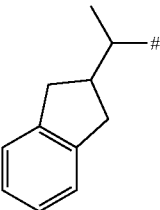
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.722		
A.1.723		
A.1.724		
A.1.725		
A.1.726		
A.1.727		
A.1.728		
A.1.729		
A.1.730		
A.1.731		

TABLE A-continued

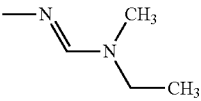
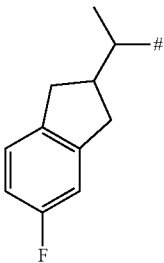
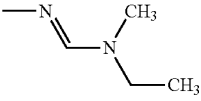
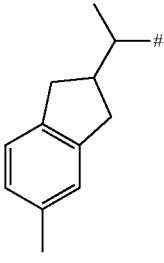
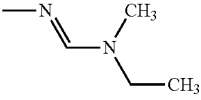
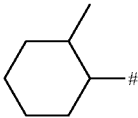
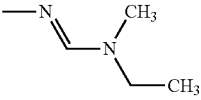

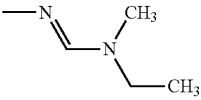
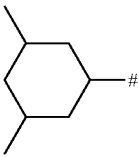
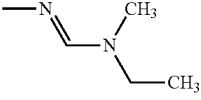
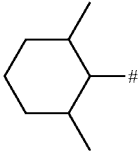
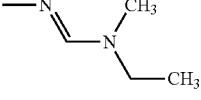
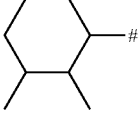
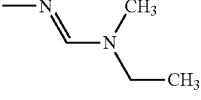
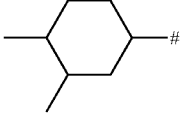
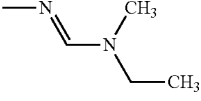
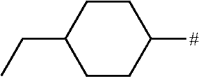
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.732		
A.1.733		
A.1.734		
A.1.735		
A.1.736		
A.1.737		
A.1.738		
A.1.739		
A.1.740		

TABLE A-continued

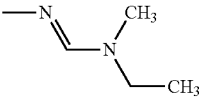
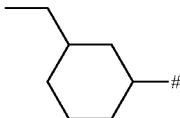
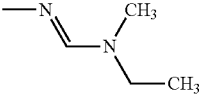
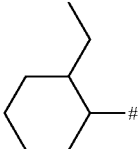
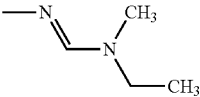
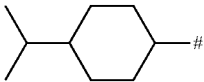
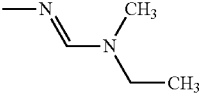
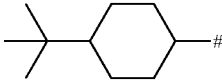
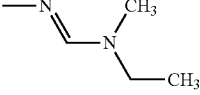
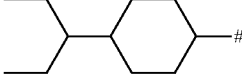
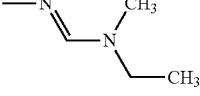
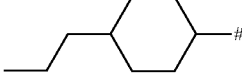
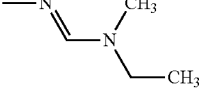

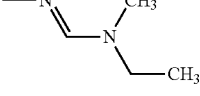
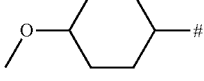
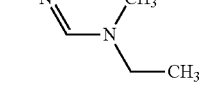
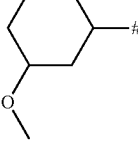
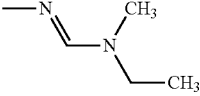
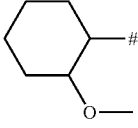
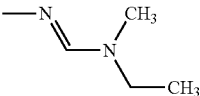
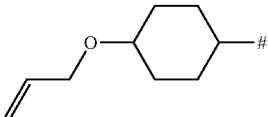
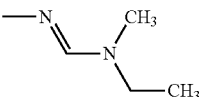
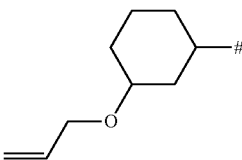
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.741		
A.1.742		
A.1.743		
A.1.744		
A.1.745		
A.1.746		
A.1.747		
A.1.748		
A.1.749		
A.1.750		
A.1.751		
A.1.752		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

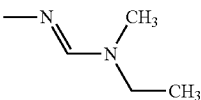
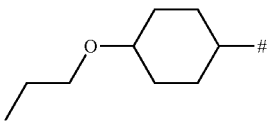
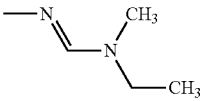
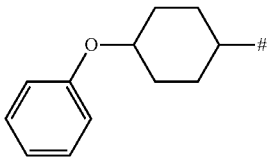
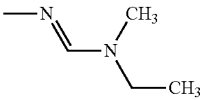
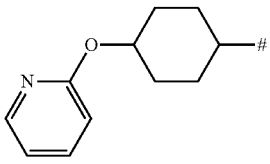
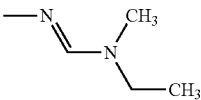
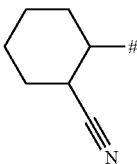
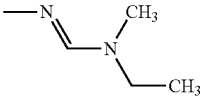
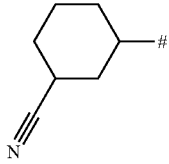
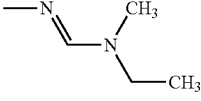
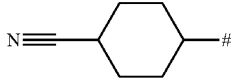
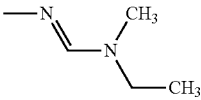
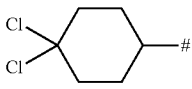
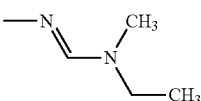
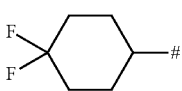
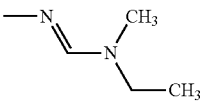
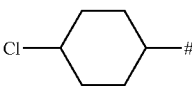
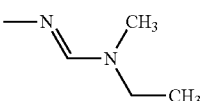
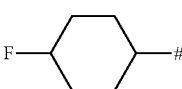
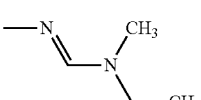
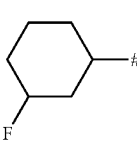
A.1.753		
A.1.754		
A.1.755		
A.1.756		
A.1.757		
A.1.758		
A.1.759		
A.1.760		
A.1.761		
A.1.762		
A.1.763		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.764		
A.1.765		
A.1.766		
A.1.767		
A.1.768		
A.1.769		
A.1.770		
A.1.771		
A.1.772		
A.1.773		
A.1.774		
A.1.775		
A.1.776		

TABLE A-continued

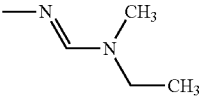
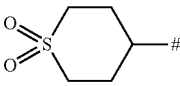
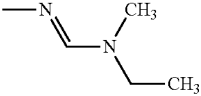
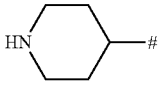
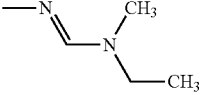
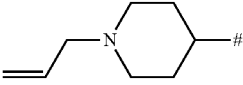
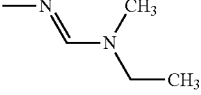
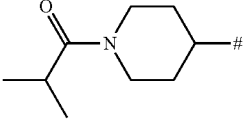
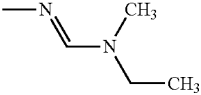
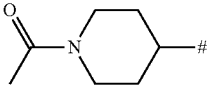
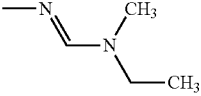
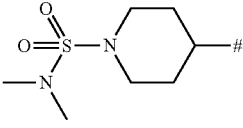
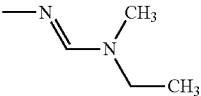
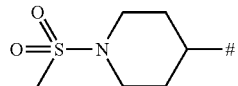
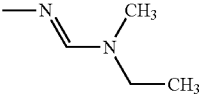
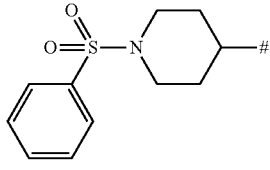
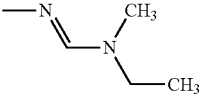
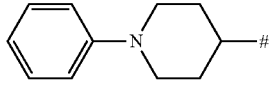
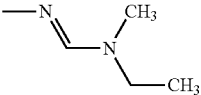
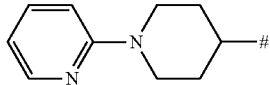
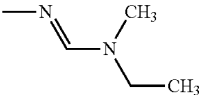
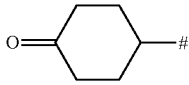
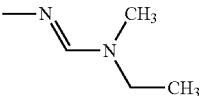
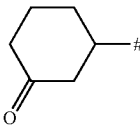
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.777		
A.1.778		
A.1.779		
A.1.780		
A.1.781		
A.1.782		
A.1.783		
A.1.784		
A.1.785		
A.1.786		
A.1.787		
A.1.788		

TABLE A-continued

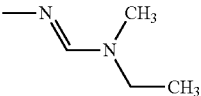
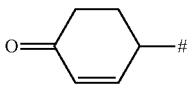
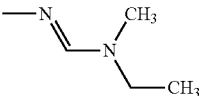
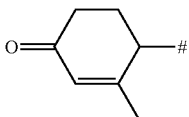
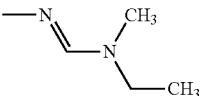
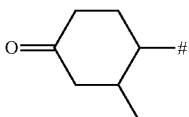
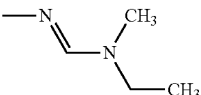
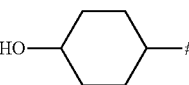
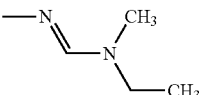
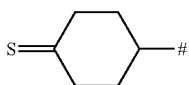
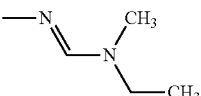
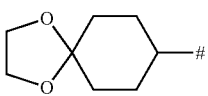
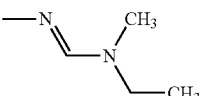
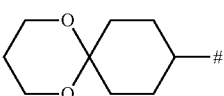
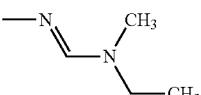
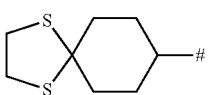
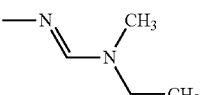
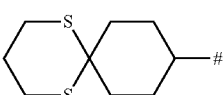
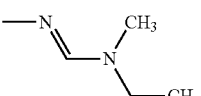
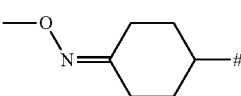
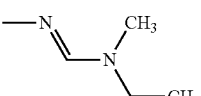
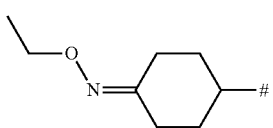
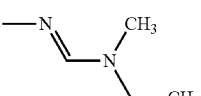
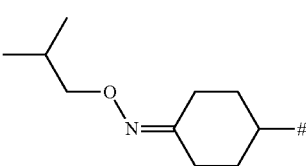
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.789		
A.1.790		
A.1.791		
A.1.792		
A.1.793		
A.1.794		
A.1.795		
A.1.796		
A.1.797		
A.1.798		
A.1.799		
A.1.800		

TABLE A-continued

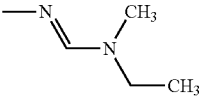
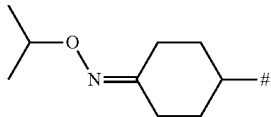
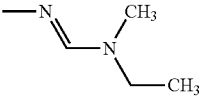
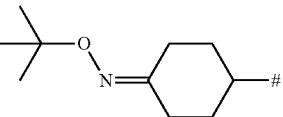
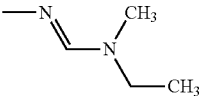
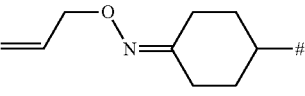
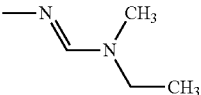
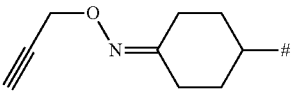
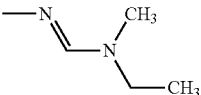
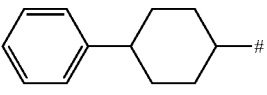
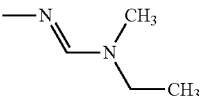
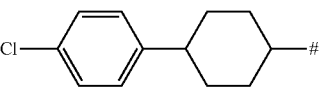
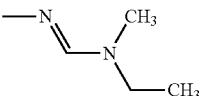
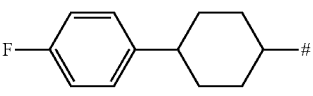
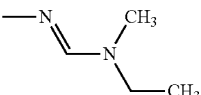
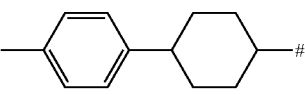
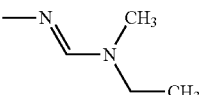
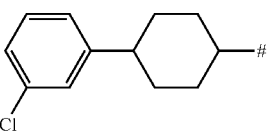
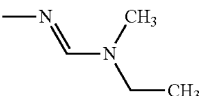
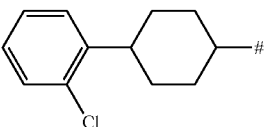
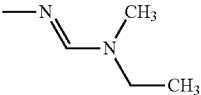
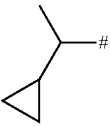
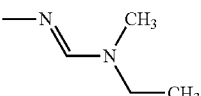
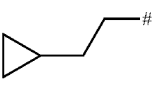
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.801		
A.1.802		
A.1.803		
A.1.804		
A.1.805		
A.1.806		
A.1.807		
A.1.808		
A.1.809		
A.1.810		
A.1.811		
A.1.812		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.813		
A.1.814		
A.1.815		
A.1.816		
A.1.817		
A.1.818		
A.1.819		
A.1.820		
A.1.821		
A.1.822		
A.1.823		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.824		
A.1.825		
A.1.826		
A.1.827		
A.1.828		
A.1.829		
A.1.830		
A.1.831		
A.1.832		
A.1.833		

TABLE A-continued

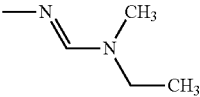
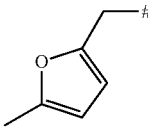
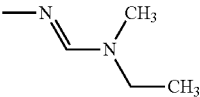
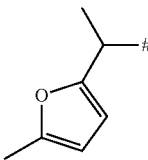
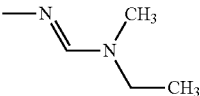
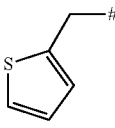
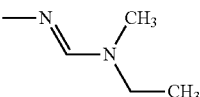
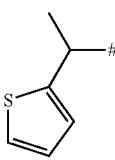
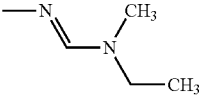
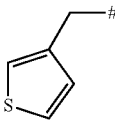
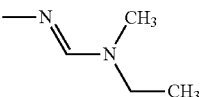
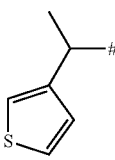
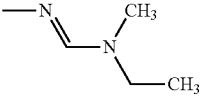
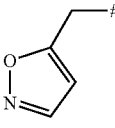
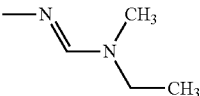
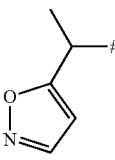
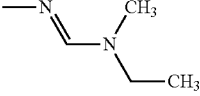
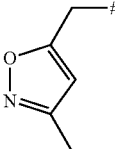
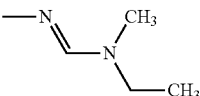
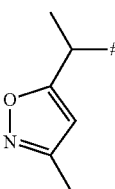
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.834		
A.1.835		
A.1.836		
A.1.837		
A.1.838		
A.1.839		
A.1.840		
A.1.841		
A.1.842		
A.1.843		

TABLE A-continued

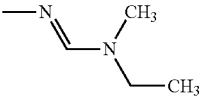
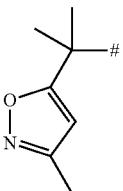
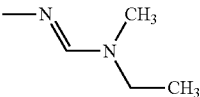
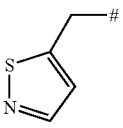
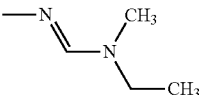
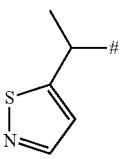
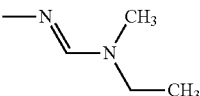
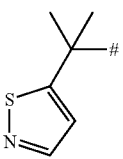
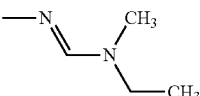
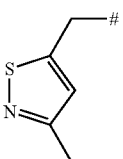
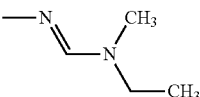
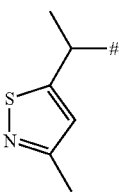
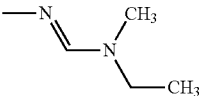
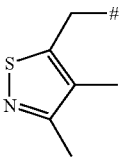
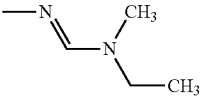
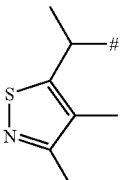
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.844		
A.1.845		
A.1.846		
A.1.847		
A.1.848		
A.1.849		
A.1.850		
A.1.851		

TABLE A-continued

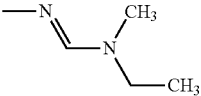
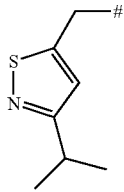
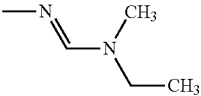
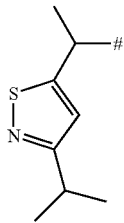
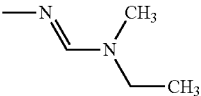
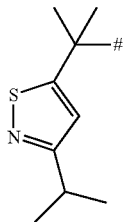
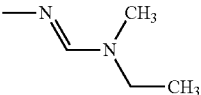
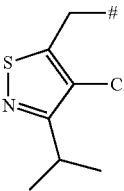
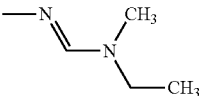
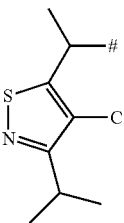
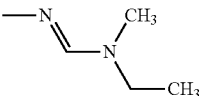
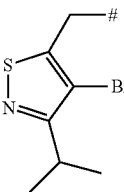
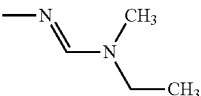
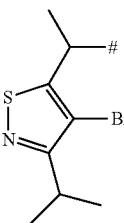
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.852		
A.1.853		
A.1.854		
A.1.855		
A.1.856		
A.1.857		
A.1.858		

TABLE A-continued

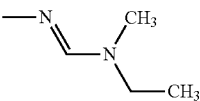
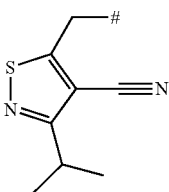
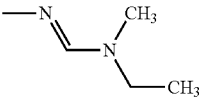
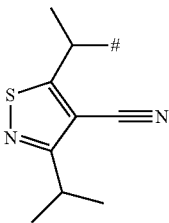
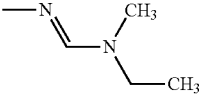
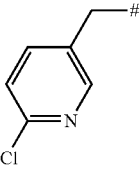
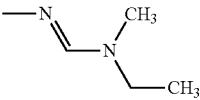
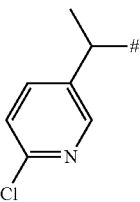
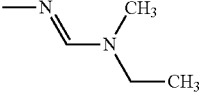
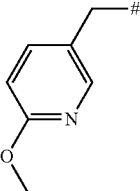
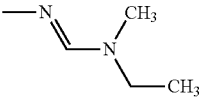
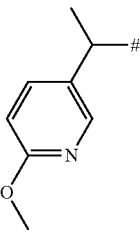
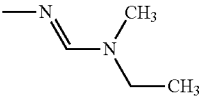
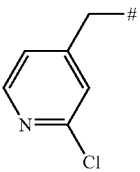
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.859		
A.1.860		
A.1.861		
A.1.862		
A.1.863		
A.1.864		
A.1.865		

TABLE A-continued

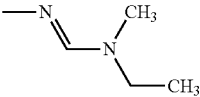
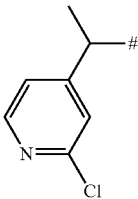
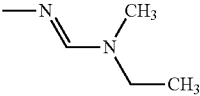
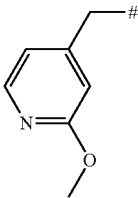
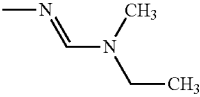
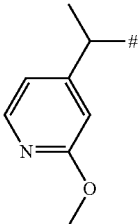
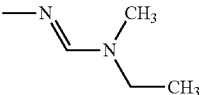
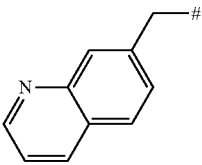
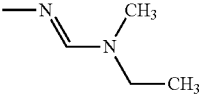
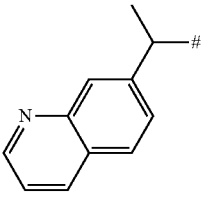
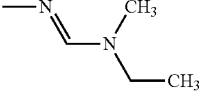
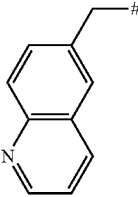
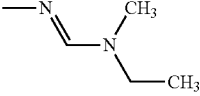
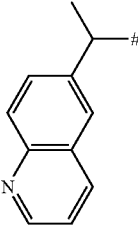
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.866		
A.1.867		
A.1.868		
A.1.869		
A.1.870		
A.1.871		
A.1.872		

TABLE A-continued

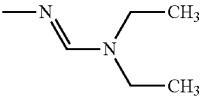
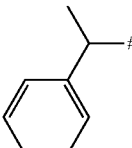
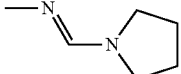
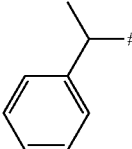
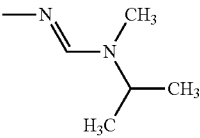
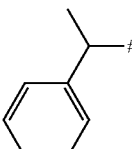
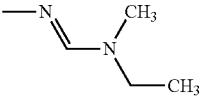
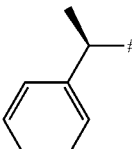
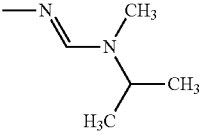
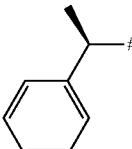
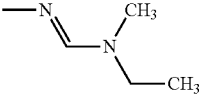
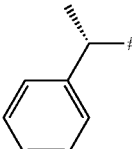
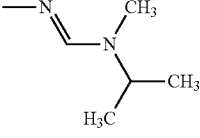
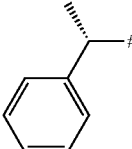
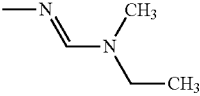
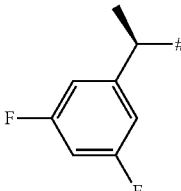
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.873		
A.1.874		
A.1.875		
A.1.876		
A.1.877		
A.1.878		
A.1.879		
A.1.880		

TABLE A-continued

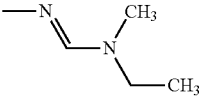
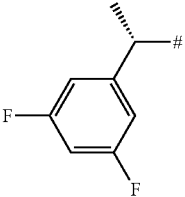
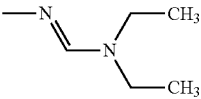
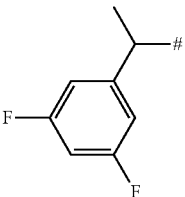
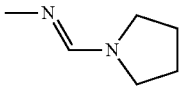
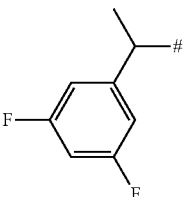
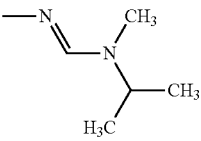
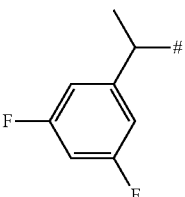
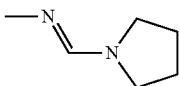
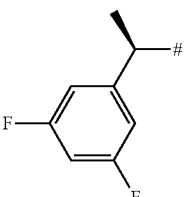
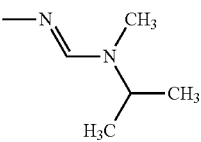
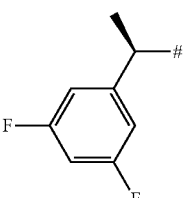
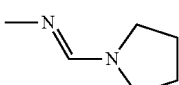
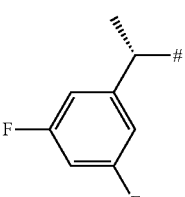
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.881		
A.1.882		
A.1.883		
A.1.884		
A.1.885		
A.1.886		
A.1.887		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :	
A.1.888	
A.1.889	
A.1.890	
A.1.891	
A.1.892	
A.1.893	
A.1.894	

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.895		
A.1.896		
A.1.897		
A.1.898		
A.1.899		
A.1.900		
A.1.901		

TABLE A-continued

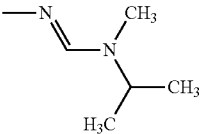
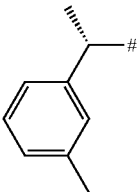
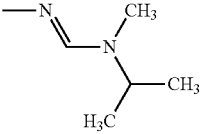
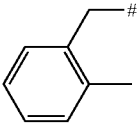
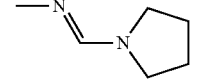
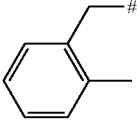
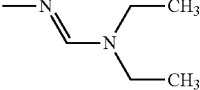
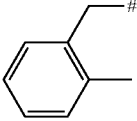
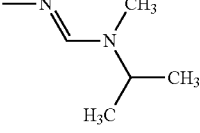
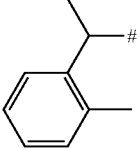
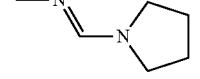
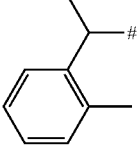
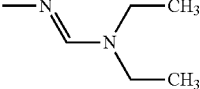
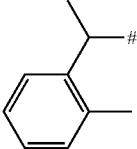
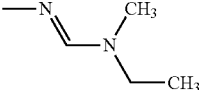
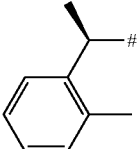
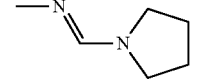
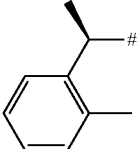
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.902		
A.1.903		
A.1.904		
A.1.905		
A.1.906		
A.1.907		
A.1.908		
A.1.909		
A.1.910		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.911		
A.1.912		
A.1.913		
A.1.914		
A.1.915		
A.1.916		
A.1.917		
A.1.918		
A.1.919		

TABLE A-continued

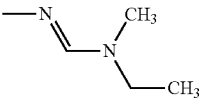
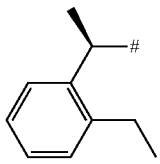
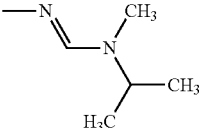
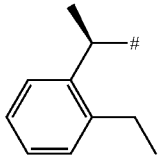
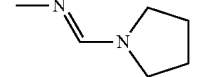
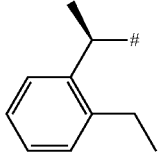
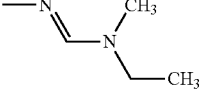
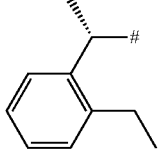
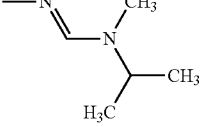
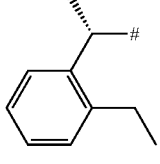
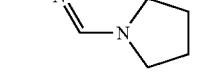
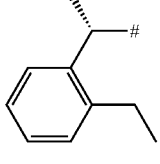
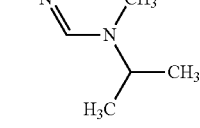
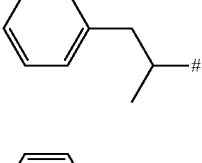
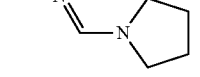
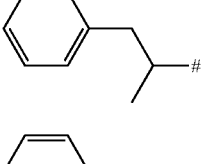
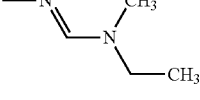
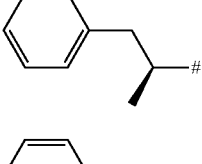
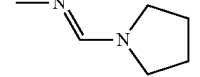
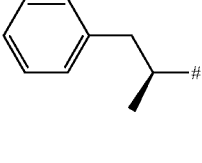
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.920		
A.1.921		
A.1.922		
A.1.923		
A.1.924		
A.1.925		
A.1.926		
A.1.927		
A.1.928		
A.1.929		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

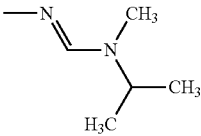
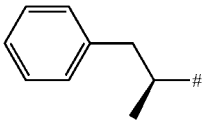
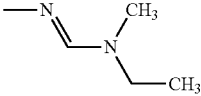
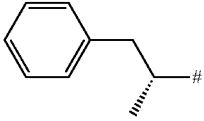
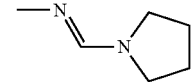
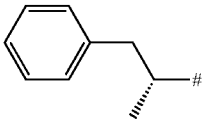
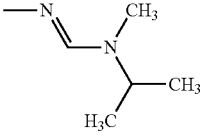
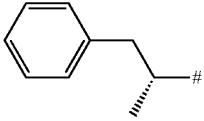
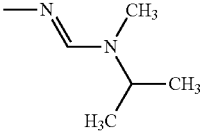

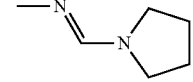

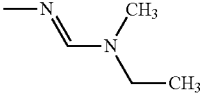
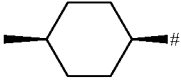
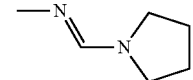
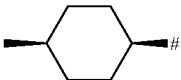
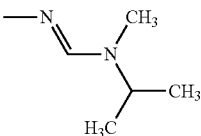
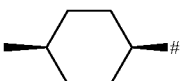
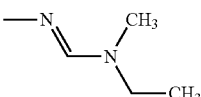
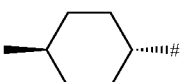
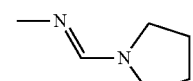
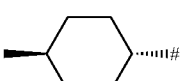
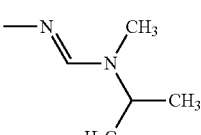
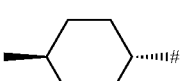
A.1.930		
A.1.931		
A.1.932		
A.1.933		
A.1.934		
A.1.935		
A.1.936		
A.1.937		
A.1.938		
A.1.939		
A.1.940		
A.1.941		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

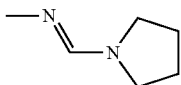
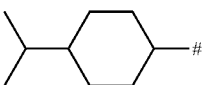
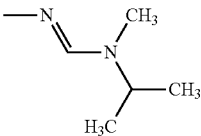
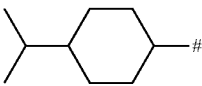
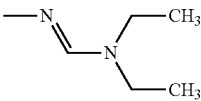
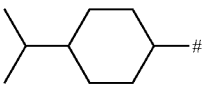
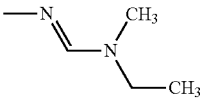
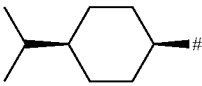
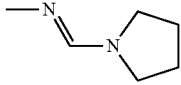
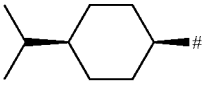
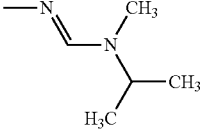
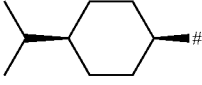
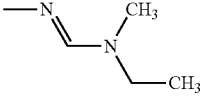
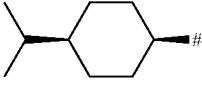
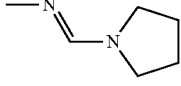
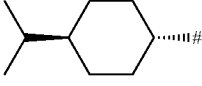
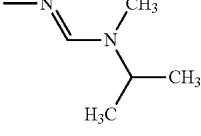
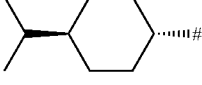
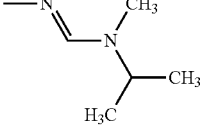
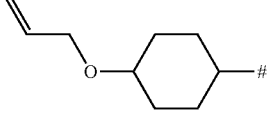
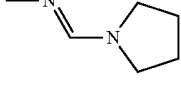
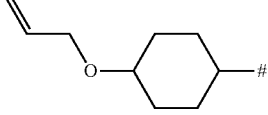
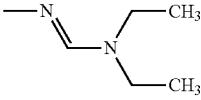
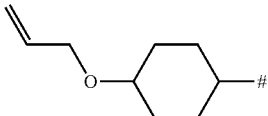
A.1.942		
A.1.943		
A.1.944		
A.1.945		
A.1.946		
A.1.947		
A.1.948		
A.1.949		
A.1.950		
A.1.951		
A.1.952		
A.1.953		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.954		
A.1.955		
A.1.956		
A.1.957		
A.1.958		
A.1.959		
A.1.960		
A.1.961		
A.1.962		
A.1.963		
A.1.964		

TABLE A-continued

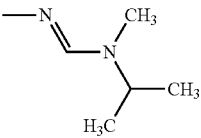
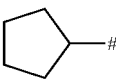
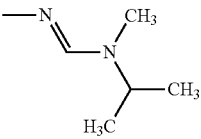
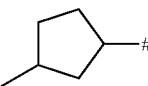
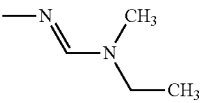
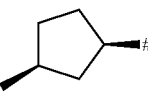
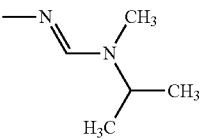
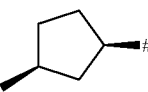
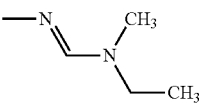
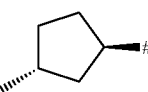
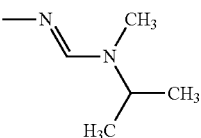
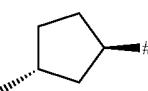
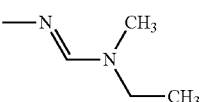
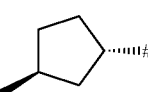
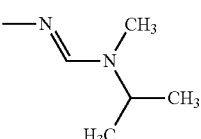
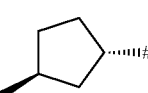
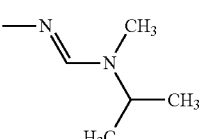
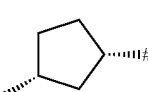
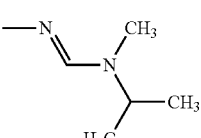
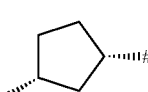
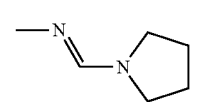
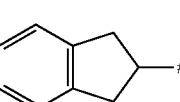
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.965		
A.1.966		
A.1.967		
A.1.968		
A.1.969		
A.1.970		
A.1.971		
A.1.972		
A.1.973		
A.1.974		
A.1.975		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.976		
A.1.977		
A.1.978		
A.1.979		
A.1.980		
A.1.981		
A.1.982		
A.1.983		
A.1.984		
A.1.985		
A.1.986		
A.1.987		

TABLE A-continued

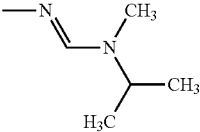
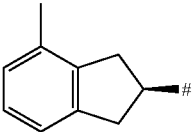
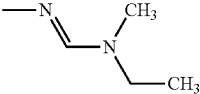
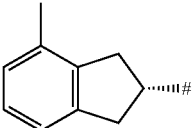
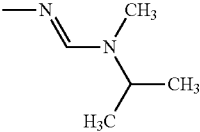
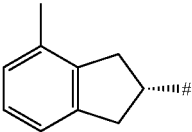
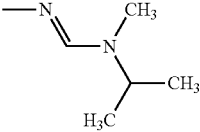
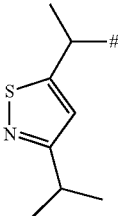
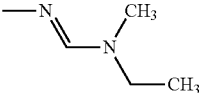
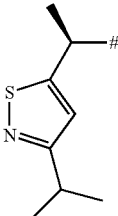
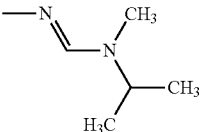
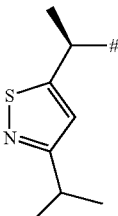
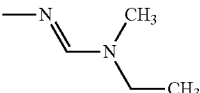
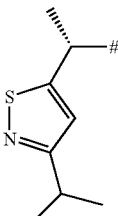
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.988		
A.1.989		
A.1.990		
A.1.991		
A.1.992		
A.1.993		
A.1.994		

TABLE A-continued

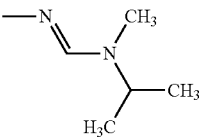
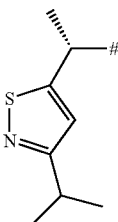
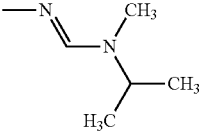
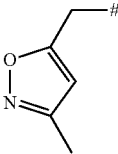
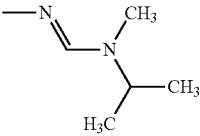
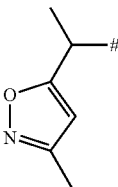
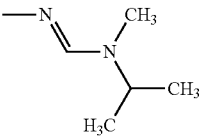
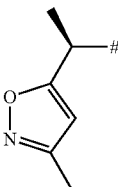
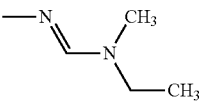
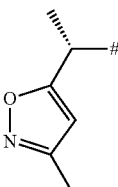
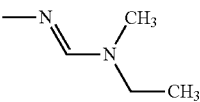
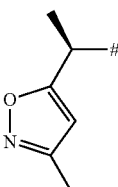
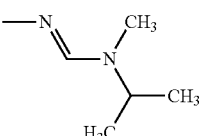
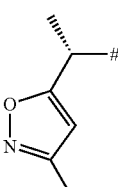
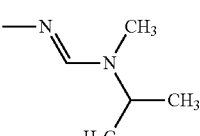
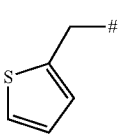
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.995		
A.1.996		
A.1.997		
A.1.998		
A.1.999		
A.1.1000		
A.1.1001		
A.1.1002		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1003		
A.1.1004		
A.1.1005		
A.1.1006		
A.1.1007		
A.1.1008		
A.1.1009		
A.1.1010		
A.1.1011		

TABLE A-continued

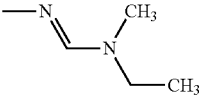
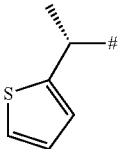
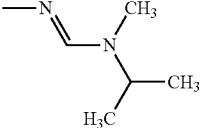
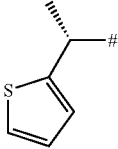
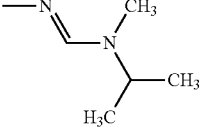
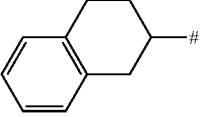
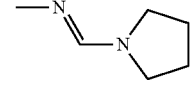
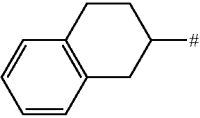
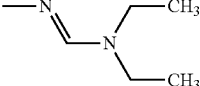
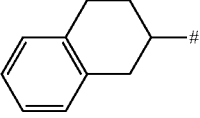
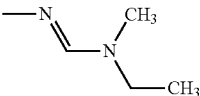
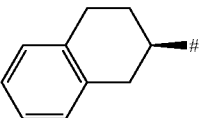
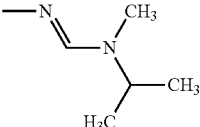
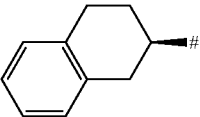
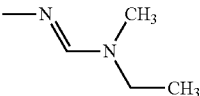
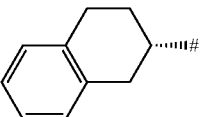
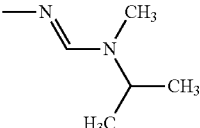
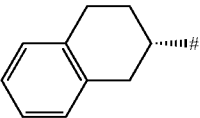
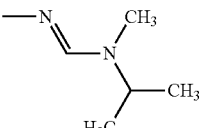
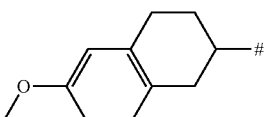
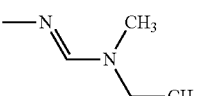
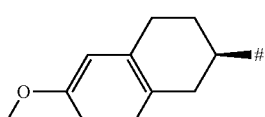
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1012		
A.1.1013		
A.1.1014		
A.1.1015		
A.1.1016		
A.1.1017		
A.1.1018		
A.1.1019		
A.1.1020		
A.1.1021		
A.1.1022		

TABLE A-continued

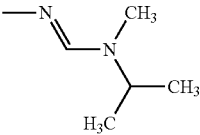
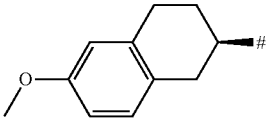
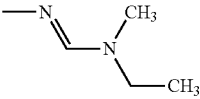
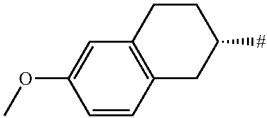
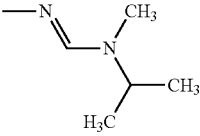
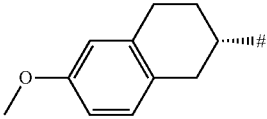
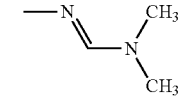
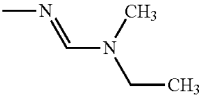
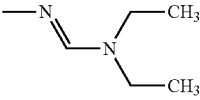
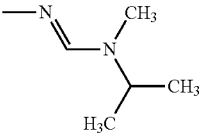
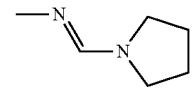
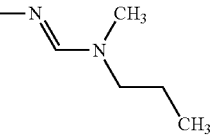
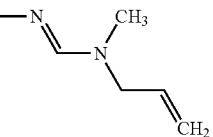
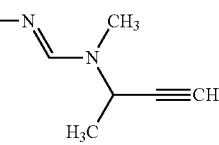
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1023		
A.1.1024		
A.1.1025		
A.1.1026		H—#
A.1.1027		H—#
A.1.1028		H—#
A.1.1029		H—#
A.1.1030		H—#
A.1.1031		H—#
A.1.1032		H—#
A.1.1033		H—#

TABLE A-continued

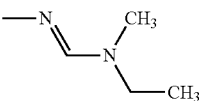
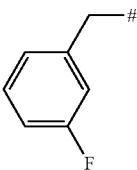
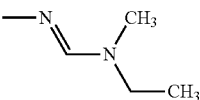
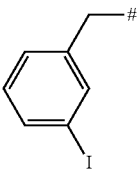
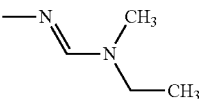
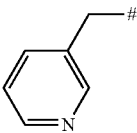
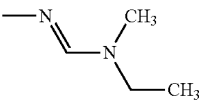
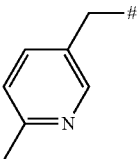
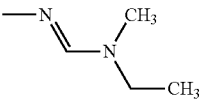
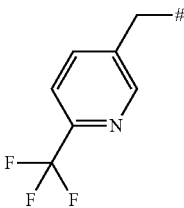
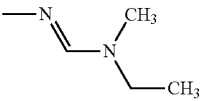
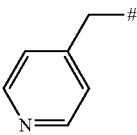
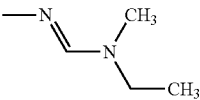
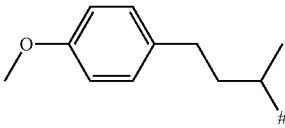
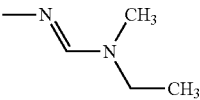
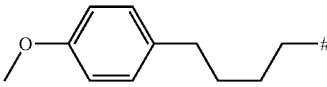
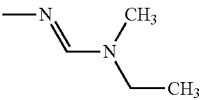
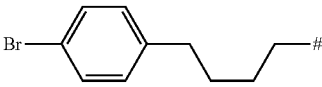
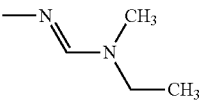
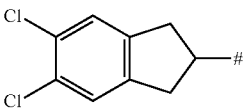
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1034		
A.1.1035		
A.1.1036		
A.1.1037		
A.1.1038		
A.1.1039		
A.1.1040		
A.1.1041		
A.1.1042		
A.1.1043		

TABLE A-continued

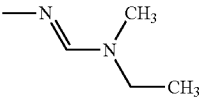
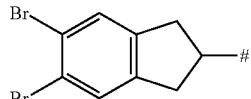
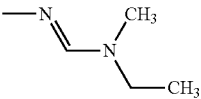
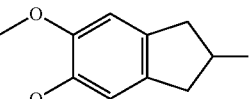
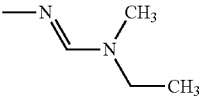
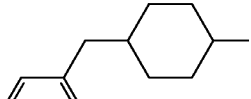
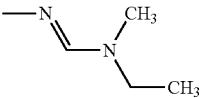
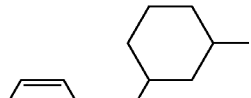
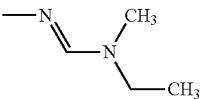
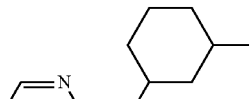
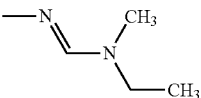
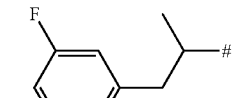
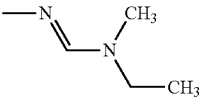
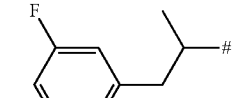
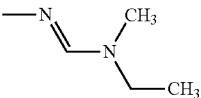
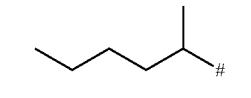
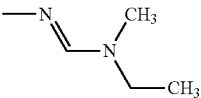
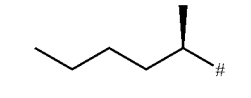
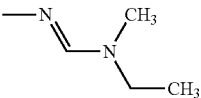
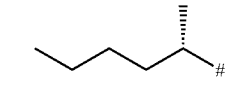
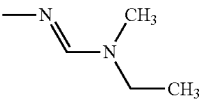
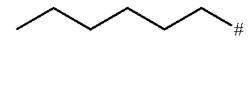
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1044		
A.1.1045		
A.1.1046		
A.1.1047		
A.1.1048		
A.1.1049		
A.1.1050		
A.1.1051		
A.1.1052		
A.1.1053		
A.1.1054		

TABLE A-continued

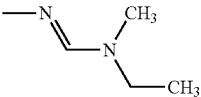
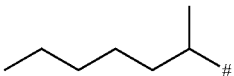
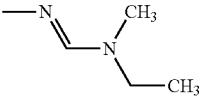

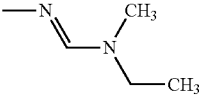
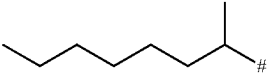
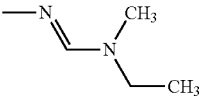
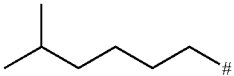
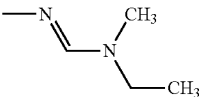
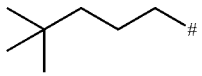
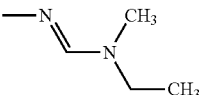
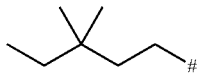
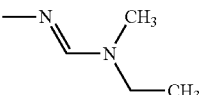
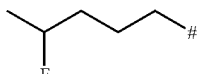
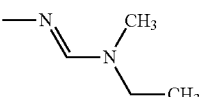
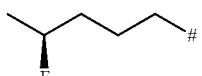
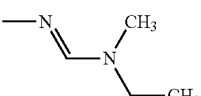
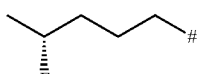
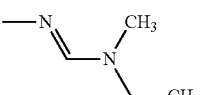
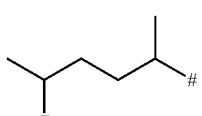
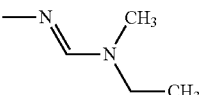
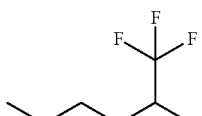
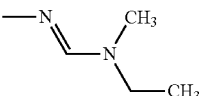
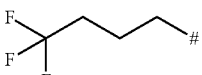
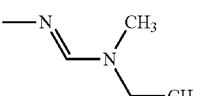
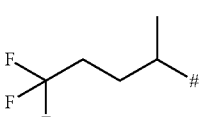
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1055		
A.1.1056		
A.1.1057		
A.1.1058		
A.1.1059		
A.1.1060		
A.1.1061		
A.1.1062		
A.1.1063		
A.1.1064		
A.1.1065		
A.1.1066		
A.1.1067		

TABLE A-continued

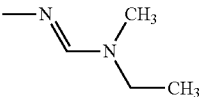
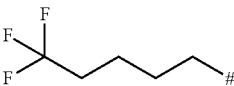
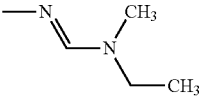
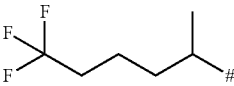
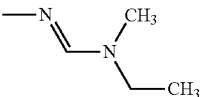
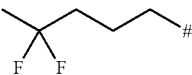
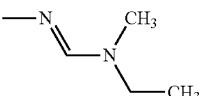
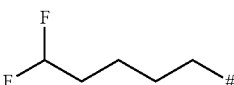
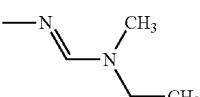
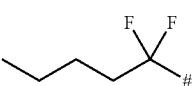
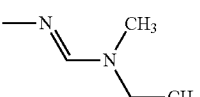
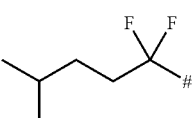
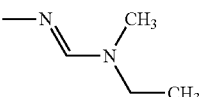
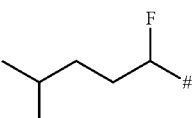
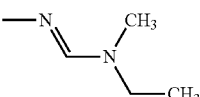
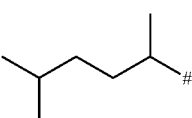
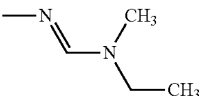
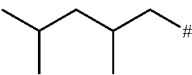
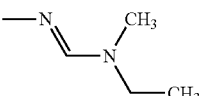
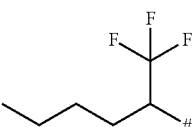
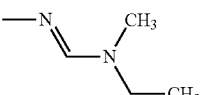
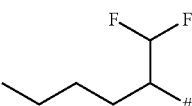
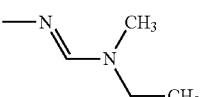
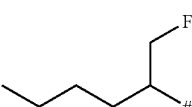
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1068		
A.1.1069		
A.1.1070		
A.1.1071		
A.1.1072		
A.1.1073		
A.1.1074		
A.1.1075		
A.1.1076		
A.1.1077		
A.1.1078		
A.1.1079		

TABLE A-continued

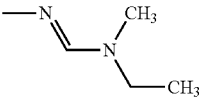
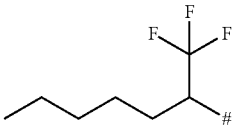
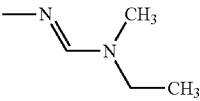
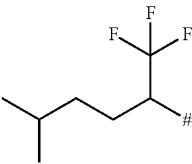
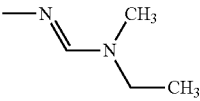
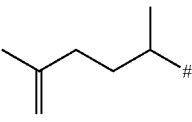
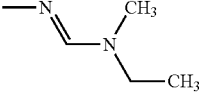
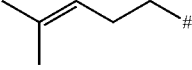
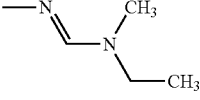
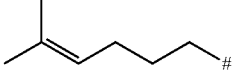
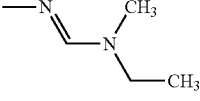
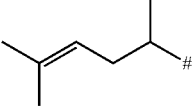
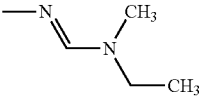
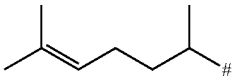
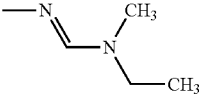
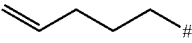
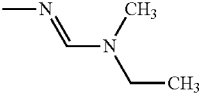
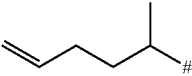
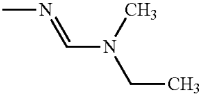
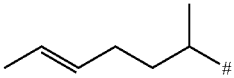
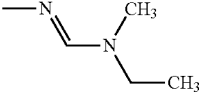
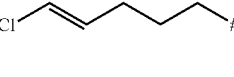
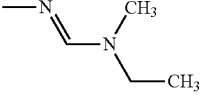
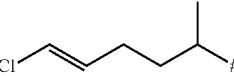
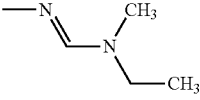
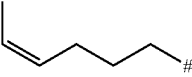
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1080		
A.1.1081		
A.1.1082		
A.1.1083		
A.1.1084		
A.1.1085		
A.1.1086		
A.1.1087		
A.1.1088		
A.1.1089		
A.1.1090		
A.1.1091		
A.1.1092		

TABLE A-continued

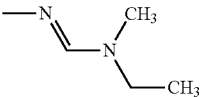
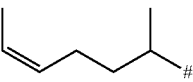
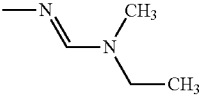
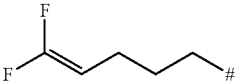
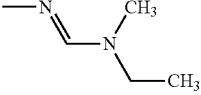
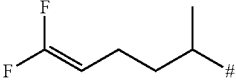
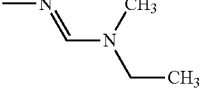
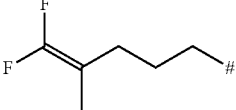
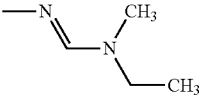
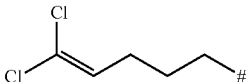
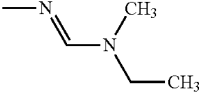
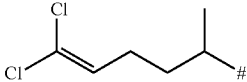
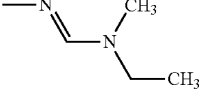
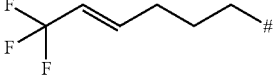
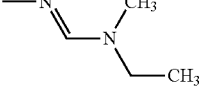
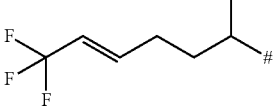
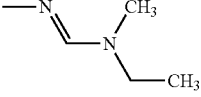

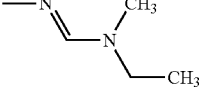

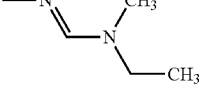
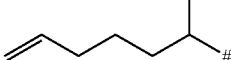
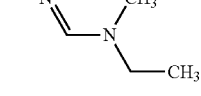
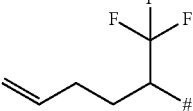
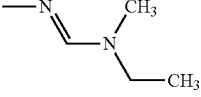
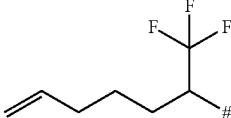
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1093		
A.1.1094		
A.1.1095		
A.1.1096		
A.1.1097		
A.1.1098		
A.1.1099		
A.1.1100		
A.1.1101		
A.1.1102		
A.1.1103		
A.1.1104		
A.1.1105		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

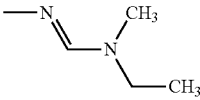
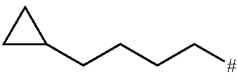
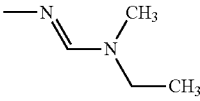
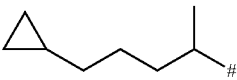
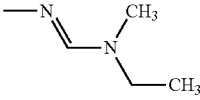
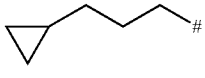
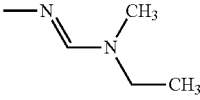
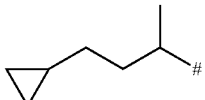
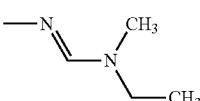
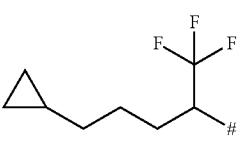
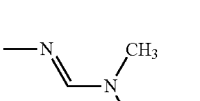
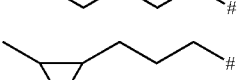
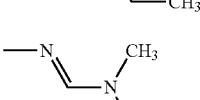
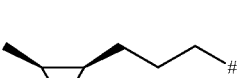
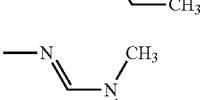

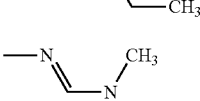

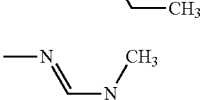

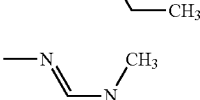
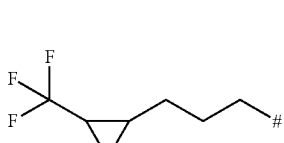
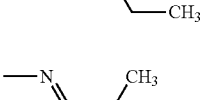
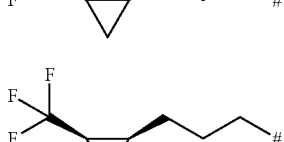
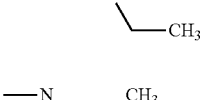
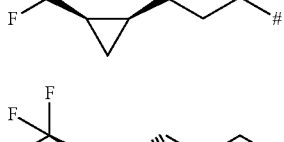
A.1.1106		
A.1.1107		
A.1.1108		
A.1.1109		
A.1.1110		
A.1.1111		
A.1.1112		
A.1.1113		
A.1.1114		
A.1.1115		
A.1.1116		
A.1.1117		
A.1.1118		

TABLE A-continued

Meanings for R₁, R₂, R₅ and R₆:

A.1.1119		
A.1.1120		
A.1.1121		
A.1.1122		
A.1.1123		
A.1.1124		
A.1.1125		
A.1.1126		
A.1.1127		
A.1.1128		

TABLE A-continued

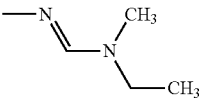
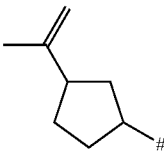
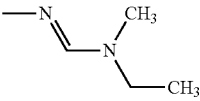
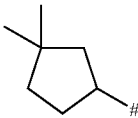
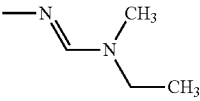
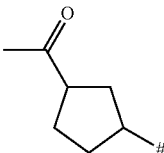
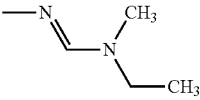
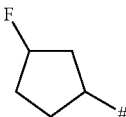
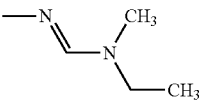

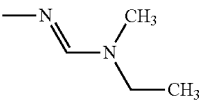
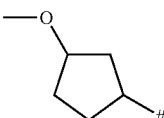
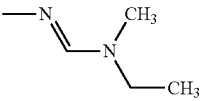
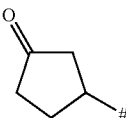
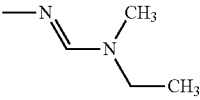
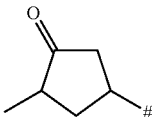
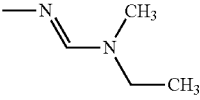
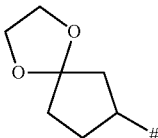
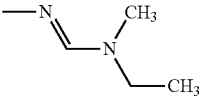
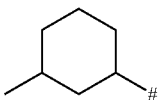
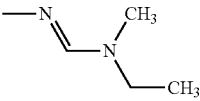
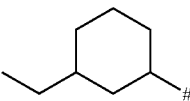
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1129		
A.1.1130		
A.1.1131		
A.1.1132		
A.1.1133		
A.1.1134		
A.1.1135		
A.1.1136		
A.1.1137		
A.1.1138		
A.1.1139		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1140		
A.1.1141		
A.1.1142		
A.1.1143		
A.1.1144		
A.1.1145		
A.1.1146		
A.1.1147		
A.1.1148		
A.1.1149		
A.1.1150		

TABLE A-continued

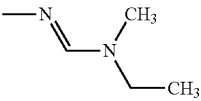
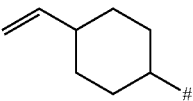
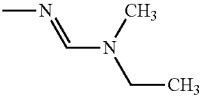
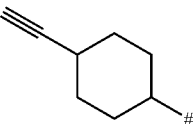
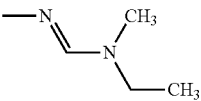
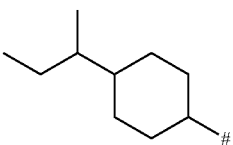
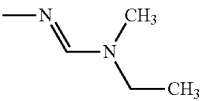
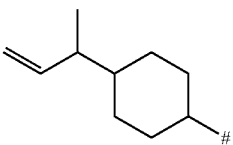
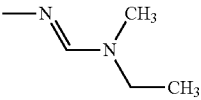
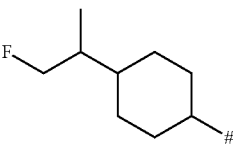
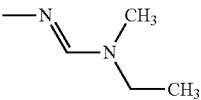
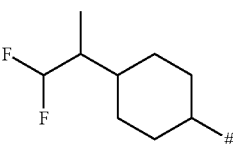
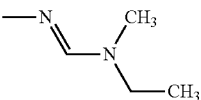
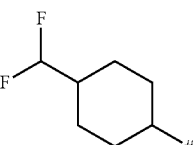
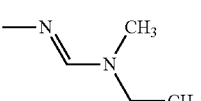
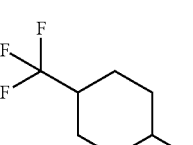
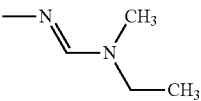
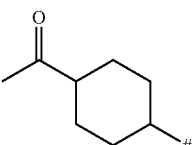
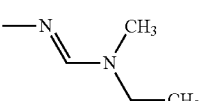
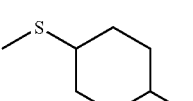
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1151		
A.1.1152		
A.1.1153		
A.1.1154		
A.1.1155		
A.1.1156		
A.1.1157		
A.1.1158		
A.1.1159		
A.1.1160		

TABLE A-continued

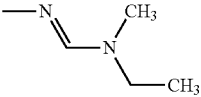
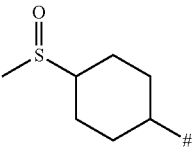
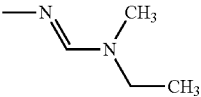
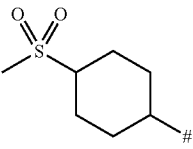
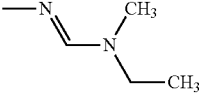
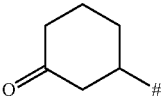
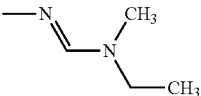
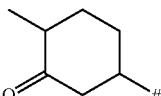
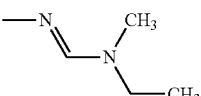
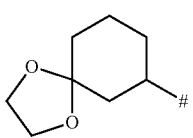
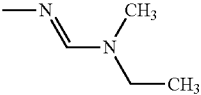
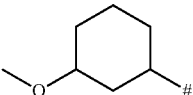
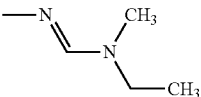
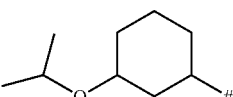
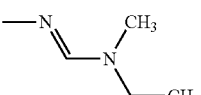
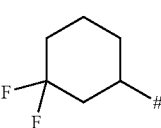
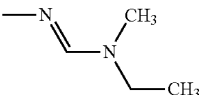
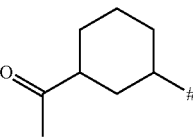
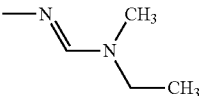
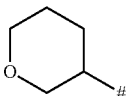
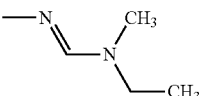
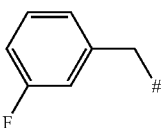
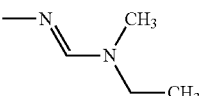
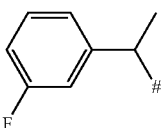
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1161		
A.1.1162		
A.1.1163		
A.1.1164		
A.1.1165		
A.1.1166		
A.1.1167		
A.1.1168		
A.1.1169		
A.1.1170		
A.1.1171		
A.1.1172		

TABLE A-continued

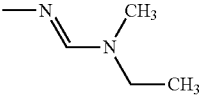
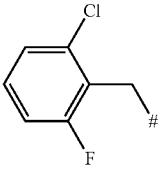
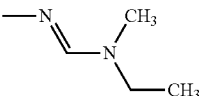
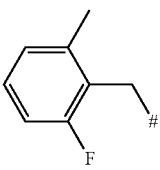
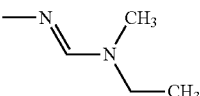
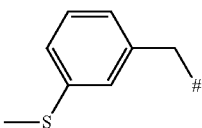
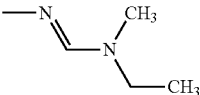
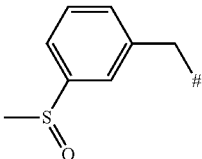
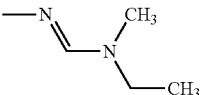
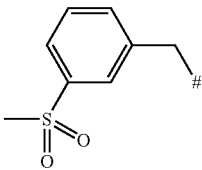
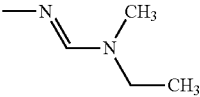
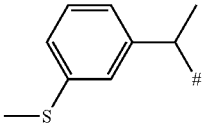
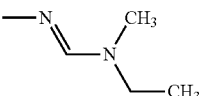
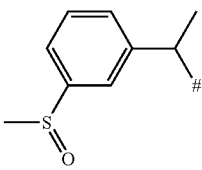
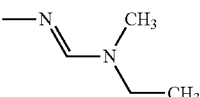
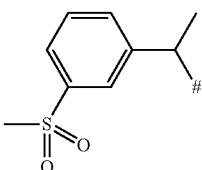
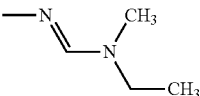
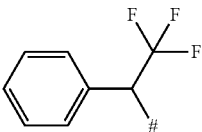
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1173		
A.1.1174		
A.1.1175		
A.1.1176		
A.1.1177		
A.1.1178		
A.1.1179		
A.1.1180		
A.1.1181		

TABLE A-continued

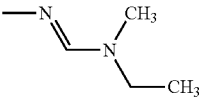
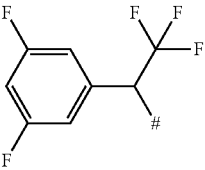
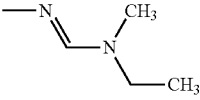
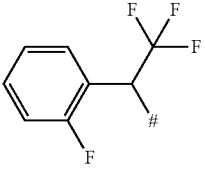
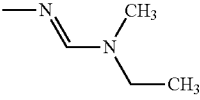
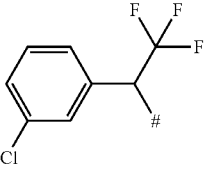
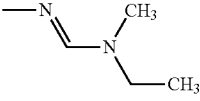
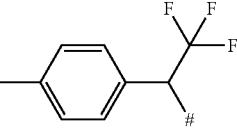
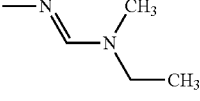
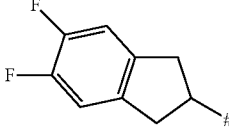
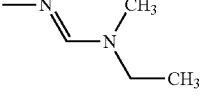
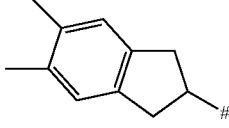
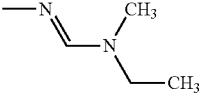
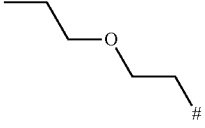
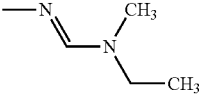
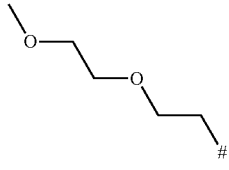
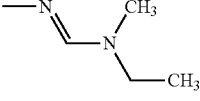
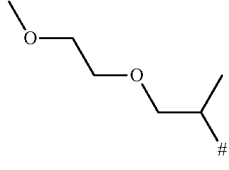
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1182		
A.1.1183		
A.1.1184		
A.1.1185		
A.1.1186		
A.1.1187		
A.1.1188		
A.1.1189		
A.1.1190		

TABLE A-continued

Meanings for R ₁ , R ₂ , R ₅ and R ₆ :		
A.1.1191		
A.1.1192		
A.1.1193		
A.1.1194		
A.1.1195		
A.1.1196		
A.1.1197		
A.1.1198		
A.1.1199		

TABLE A-continued

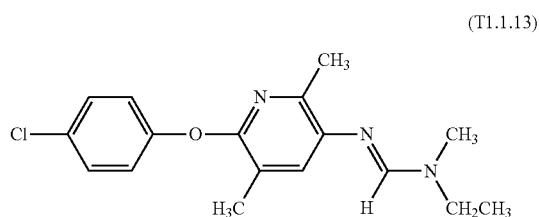
Meanings for R ₁ , R ₂ , R ₅ and R ₆ :	
A.1.1200	
A.1.1201	

The following tables T1 to T151 disclose preferred compounds of formula I for inclusion as component A in compositions of the invention.

TABLE 1

This table discloses the 1201 compounds T1.1.1 to T1.1.1201 of the formula	
(T1)	

in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A. For example, the specific compound T1.1.13 is the compound of the formula T1, in which each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the line A.1.13 of Table A:



According to the same system, also all of the other 1201 specific compounds disclosed in the Table 1 as well as all of the specific compounds disclosed in the Tables 2 to T151 are specified analogously.

TABLE 2

This table discloses the 1201 compounds T2.1.1 to T2.1.1201 of the formula	
(T2)	

in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 3

This table discloses the 1201 compounds T3.1.1 to T3.1.1201 of the formula	
(T3)	

in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 4

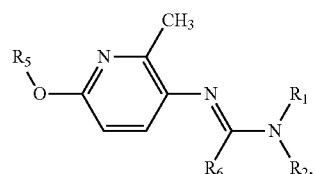
This table discloses the 1201 compounds T4.1.1 to T4.1.1201 of the formula	
(T4)	

in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 5

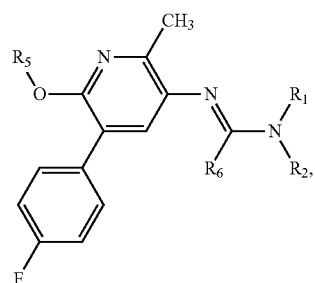
This table discloses the 1201 compounds
T5.1.1 to T5.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 6

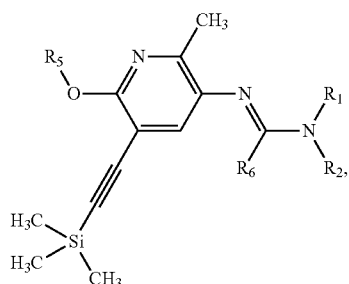
This table discloses the 1201 compounds
T6.1.1 to T6.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 7

This table discloses the 1201 compounds T7.1.1 to T7.1.1201 of the formula

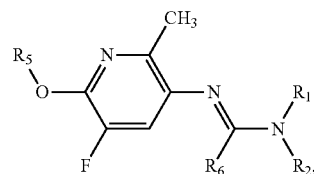


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 8

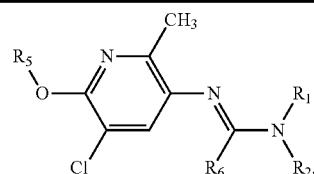
This table discloses the 1201 compounds T8.1.1 to T8.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 9

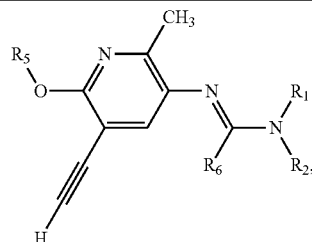
This table discloses the 1201 compounds T9.1.1 to T9.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 10

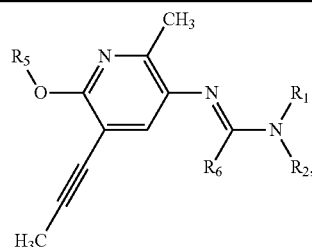
This table discloses the 1201 compounds T10.1.1 to T10.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 11

This table discloses the 1201 compounds T11.1.1 to T11.1.1201 of the formula

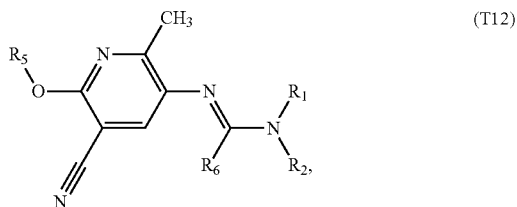


473

in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 12

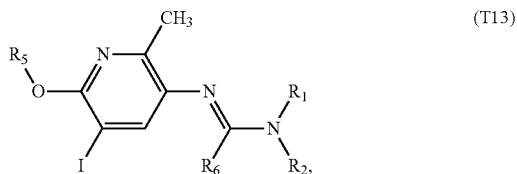
This table discloses the 1201 compounds T12.1.1 to T12.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 13

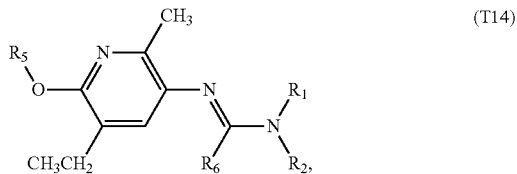
This table discloses the 1201 compounds T13.1.1 to T13.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 14

This table discloses the 1201 compounds T14.1.1 to T14.1.1201 of the formula

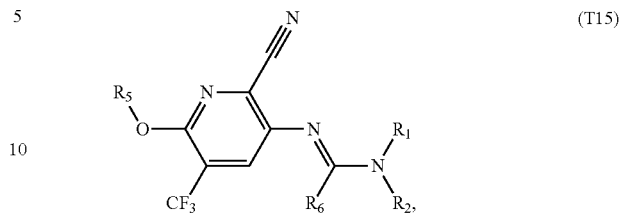


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

474

TABLE 15

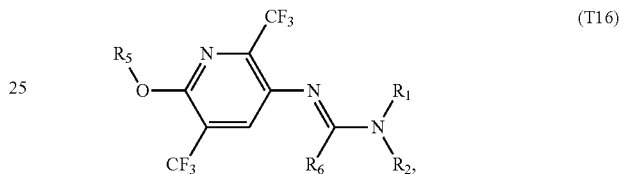
This table discloses the 1201 compounds T15.1.1 to T15.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 16

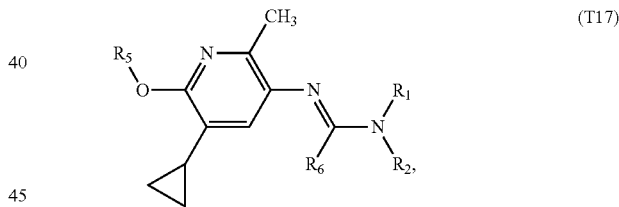
This table discloses the 1201 compounds T16.1.1 to T16.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 17

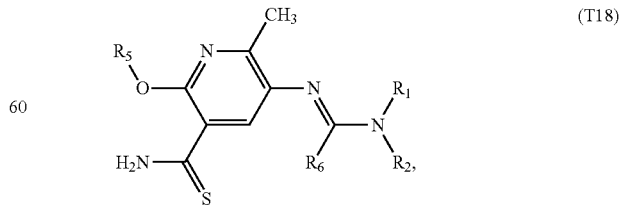
This table discloses the 1201 compounds T17.1.1 to T17.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 18

This table discloses the 1201 compounds T18.1.1 to T18.1.1201 of the formula



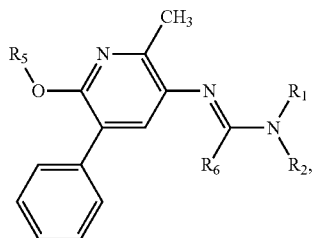
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning

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given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 19

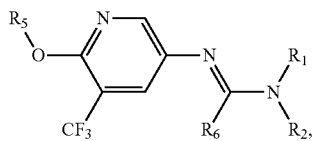
This table discloses the 1201 compounds T19.1.1 to T19.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 20

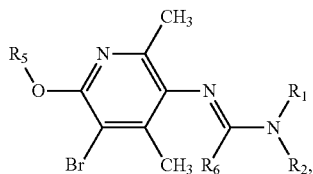
This table discloses the 1201 compounds T20.1.1 to T20.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 21

This table discloses the 1201 compounds T21.1.1 to T21.1.1201 of the formula

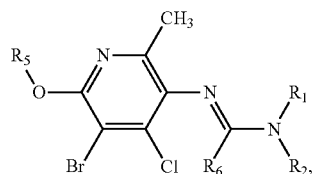


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 22

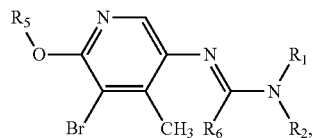
This table discloses the 1201 compounds T22.1.1 to T22.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 23

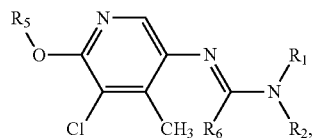
This table discloses the 1201 compounds T23.1.1 to T23.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 24

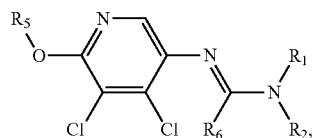
This table discloses the 1201 compounds T24.1.1 to T24.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 25

This table discloses the 1201 compounds T25.1.1 to T25.1.1201 of the formula

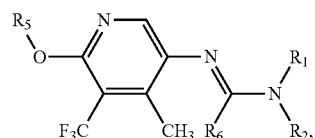


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 26

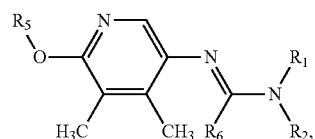
This table discloses the 1201 compounds
T26.1.1 to T26.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 27

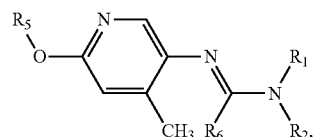
This table discloses the 1201 compounds
T27.1.1 to T27.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 28

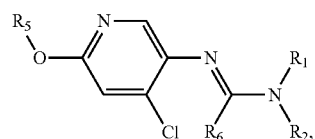
This table discloses the 1201 compounds
T28.1.1 to T28.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 29

This table discloses the 1201 compounds
T29.1.1 to T29.1.1201 of the formula

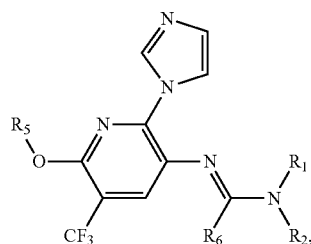


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 30

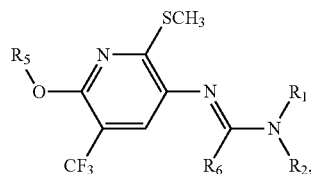
This table discloses the 1201 compounds
T30.1.1 to T30.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 31

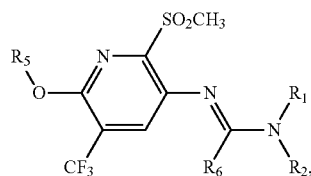
This table discloses the 1201 compounds
T31.1.1 to T31.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 32

This table discloses the 1201 compounds
T32.1.1 to T32.1.1201 of the formula



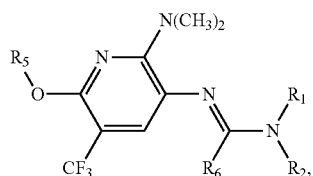
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 33

This table discloses the 1201 compounds
T33.1.1 to T33.1.1201 of the formula

(T33)

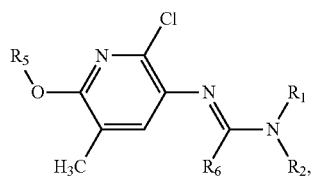


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 34

This table discloses the 1201 compounds
T34.1.1 to T34.1.1201 of the formula

(T34)

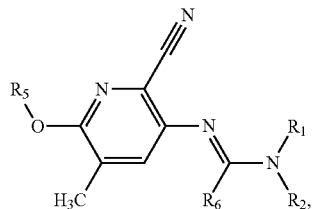


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 35

This table discloses the 1201 compounds
T35.1.1 to T35.1.1201 of the formula

(T35)



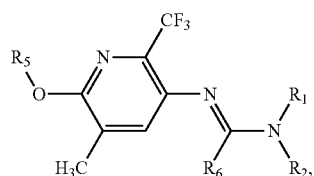
in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 36

This table discloses the 1201 compounds
T36.1.1 to T36.1.1201 of the formula

(T36)

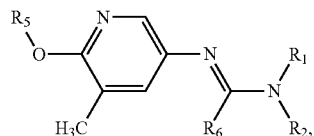


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 37

This table discloses the 1201 compounds
T37.1.1 to T37.1.1201 of the formula

(T37)

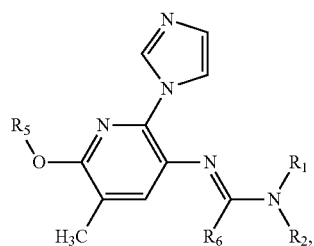


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 38

This table discloses the 1201 compounds
T38.1.1 to T38.1.1201 of the formula

(T38)



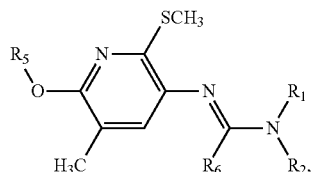
in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 39

This table discloses the 1201 compounds
T39.1.1 to T39.1.1201 of the formula

(T39)

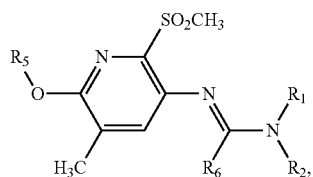


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 40

This table discloses the 1201 compounds
T40.1.1 to T40.1.1201 of the formula

(T40)

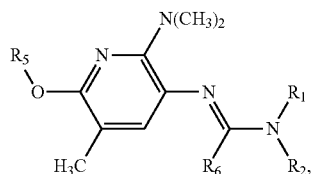


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 41

This table discloses the 1201 compounds
T41.1.1 to T41.1.1201 of the formula

(T41)



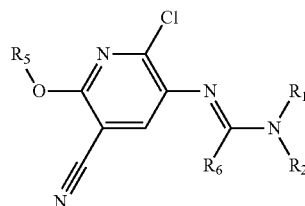
in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 42

This table discloses the 1201 compounds
T42.1.1 to T42.1.1201 of the formula

(T42)

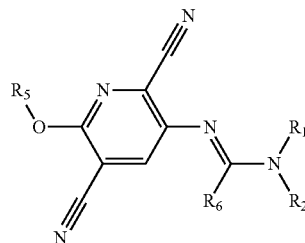


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 43

This table discloses the 1201 compounds
T43.1.1 to T43.1.1201 of the formula

(T43)

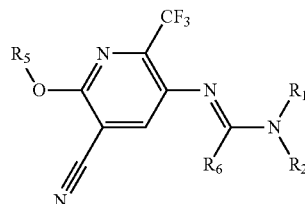


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 44

This table discloses the 1201 compounds
T44.1.1 to T44.1.1201 of the formula

(T44)

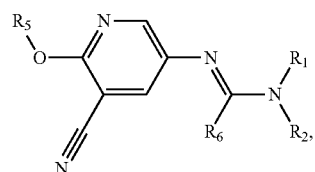


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 45

This table discloses the 1201 compounds
T45.1.1 to T45.1.1201 of the formula

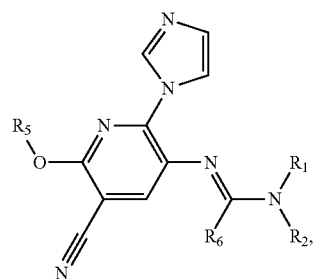


(T45)

in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 46

This table discloses the 1201 compounds
T46.1.1 to T46.1.1201 of the formula

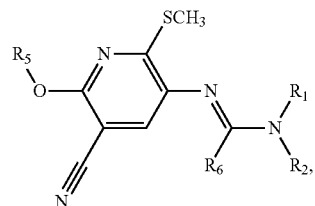


(T46)

in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 47

This table discloses the 1201 compounds
T47.1.1 to T47.1.1201 of the formula



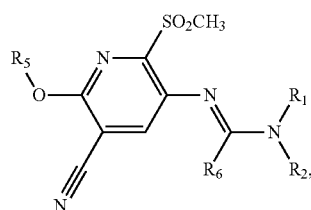
(T47)

in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 48

This table discloses the 1201 compounds
T48.1.1 to T48.1.1201 of the formula

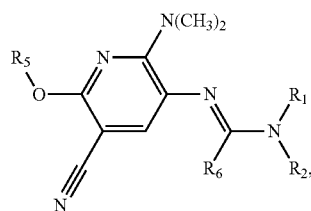


(T48)

in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 49

This table discloses the 1201 compounds
T49.1.1 to T49.1.1201 of the formula

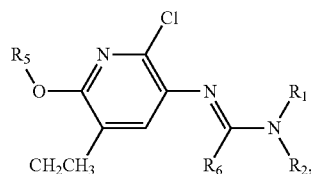


(T49)

in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 50

This table discloses the 1201 compounds
T50.1.1 to T50.1.1201 of the formula



(T50)

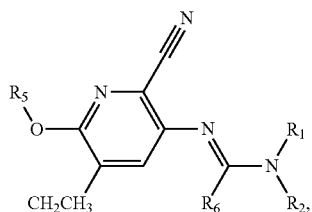
in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 51

This table discloses the 1201 compounds
T51.1.1 to T51.1.1201 of the formula

(T51)

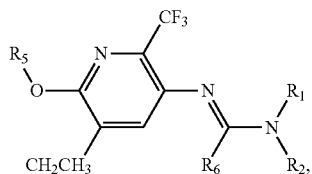


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 52

This table discloses the 1201 compounds
T52.1.1 to T52.1.1201 of the formula

(T52)

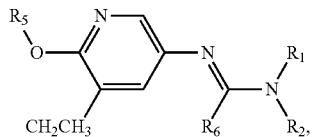


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 53

This table discloses the 1201 compounds
T53.1.1 to T53.1.1201 of the formula

(T53)



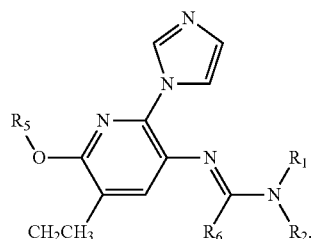
in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 54

This table discloses the 1201 compounds
T54.1.1 to T54.1.1201 of the formula

(T54)

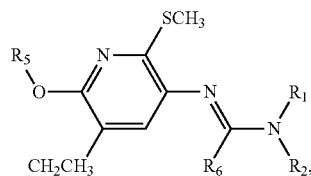


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 55

This table discloses the 1201 compounds
T55.1.1 to T55.1.1201 of the formula

(T55)

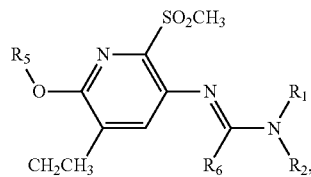


in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 56

This table discloses the 1201 compounds
T56.1.1 to T56.1.1201 of the formula

(T56)



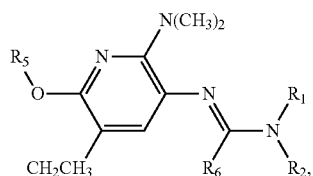
in which, for each of these 1201 specific compounds, each
of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 57

This table discloses the 1201 compounds
T57.1.1 to T57.1.1201 of the formula

(T57)

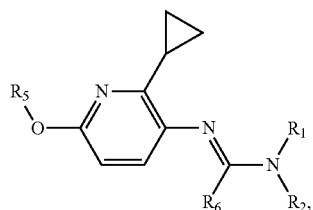


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 58

This table discloses the 1201 compounds
T58.1.1 to T58.1.1201 of the formula

(T58)

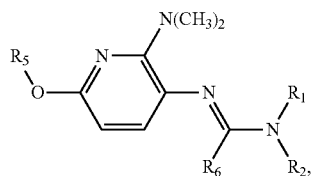


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 59

This table discloses the 1201 compounds
T59.1.1 to T59.1.1201 of the formula

(T59)



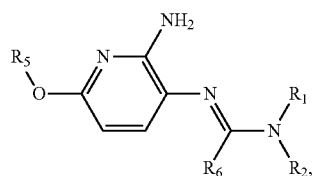
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 60

This table discloses the 1201 compounds
T60.1.1 to T60.1.1201 of the formula

(T60)

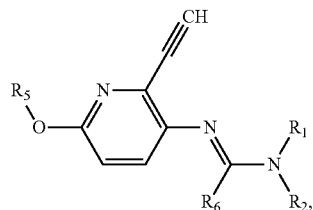


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 61

This table discloses the 1201 compounds
T61.1.1 to T61.1.1201 of the formula

(T61)

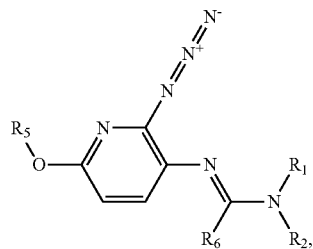


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 62

This table discloses the 1201 compounds
T62.1.1 to T62.1.1201 of the formula

(T62)



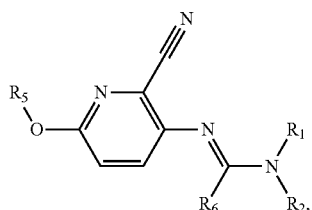
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 63

This table discloses the 1201 compounds
T63.1.1 to T63.1.1201 of the formula

(T63)

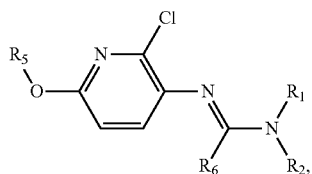


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 64

This table discloses the 1201 compounds
T64.1.1 to T64.1.1201 of the formula

(T64)

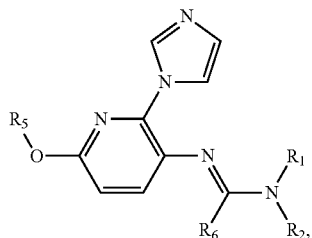


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 65

This table discloses the 1201 compounds
T65.1.1 to T65.1.1201 of the formula

(T65)



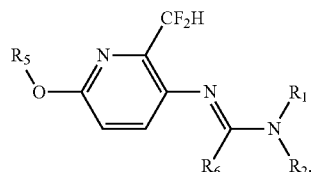
in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 66

This table discloses the 1201 compounds
T66.1.1 to T66.1.1201 of the formula

(T66)

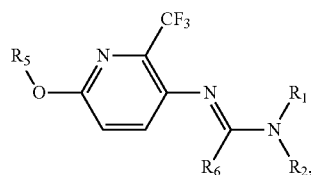


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 67

This table discloses the 1201 compounds
T67.1.1 to T67.1.1201 of the formula

(T67)

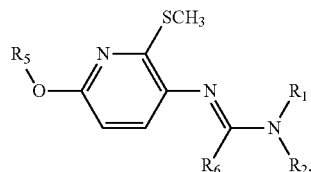


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 68

This table discloses the 1201 compounds
T68.1.1 to T68.1.1201 of the formula

(T68)

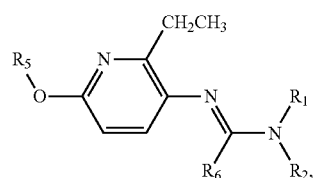


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 69

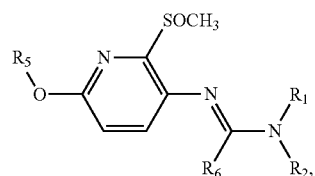
This table discloses the 1201 compounds
T69.1.1 to T69.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 70

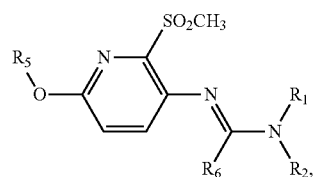
This table discloses the 1201 compounds
T70.1.1 to T70.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 71

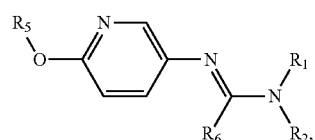
This table discloses the 1201 compounds
T71.1.1 to T71.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 72

This table discloses the 1201 compounds
T72.1.1 to T72.1.1201 of the formula

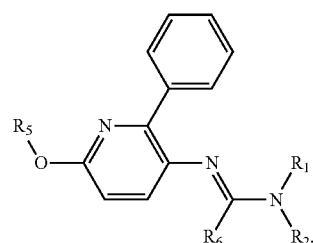


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 73

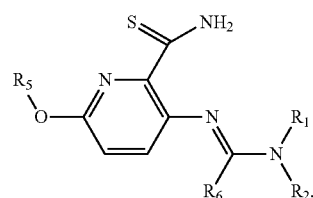
This table discloses the 1201 compounds
T73.1.1 to T73.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 74

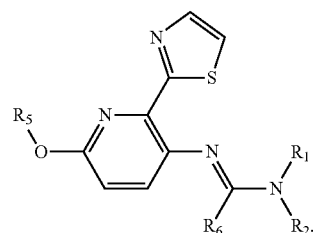
This table discloses the 1201 compounds
T74.1.1 to T74.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 75

This table discloses the 1201 compounds
T75.1.1 to T75.1.1201 of the formula

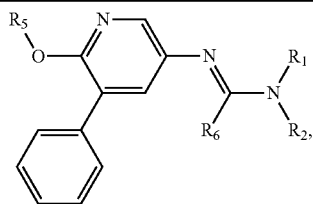


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 76

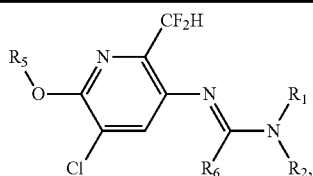
This table discloses the 1201 compounds T76.1.1 to T76.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 77

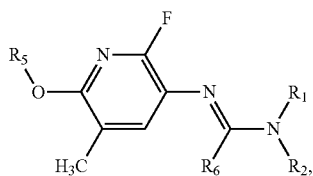
This table discloses the 1201 compounds T77.1.1 to T77.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 78

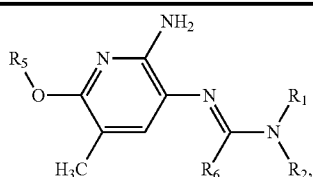
This table discloses the 1201 compounds T78.1.1 to T78.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 79

This table discloses the 1201 compounds T79.1.1 to T79.1.1201 of the formula



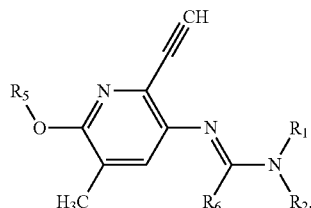
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning

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given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 80

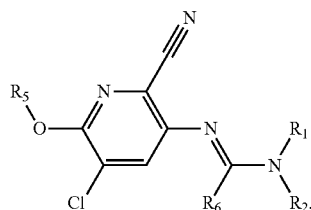
This table discloses the 1201 compounds T80.1.1 to T80.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 81

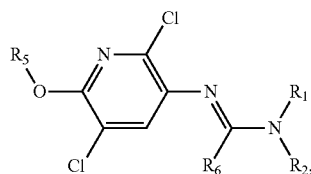
This table discloses the 1201 compounds T81.1.1 to T81.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 82

This table discloses the 1201 compounds T82.1.1 to T82.1.1201 of the formula

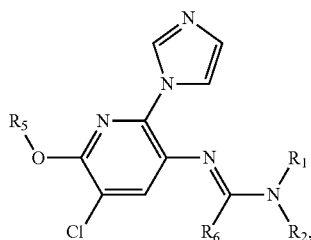


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 83

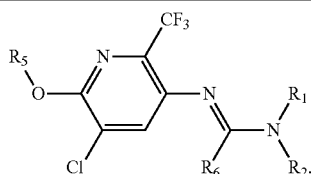
This table discloses the 1201 compounds T83.1.1 to T83.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 84

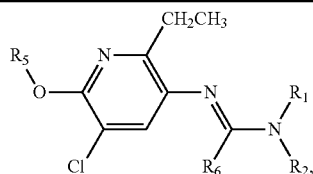
This table discloses the 1201 compounds T84.1.1 to T84.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 85

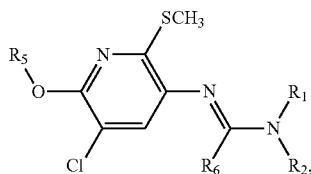
This table discloses the 1201 compounds T85.1.1 to T85.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 86

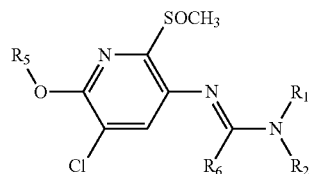
This table discloses the 1201 compounds T86.1.1 to T86.1.1201 of the formula



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TABLE 87

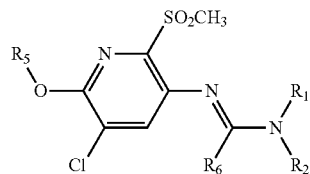
This table discloses the 1201 compounds T87.1.1 to T87.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 88

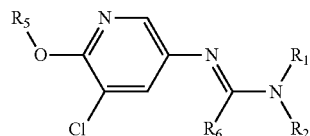
This table discloses the 1201 compounds T88.1.1 to T88.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 89

This table discloses the 1201 compounds T89.1.1 to T89.1.1201 of the formula

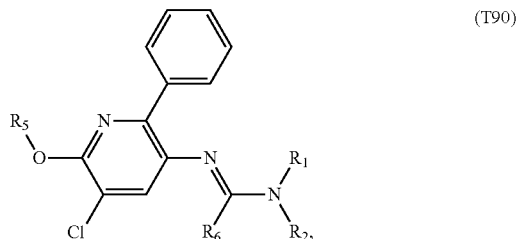


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 90

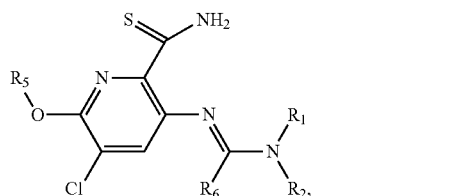
This table discloses the 1201 compounds T90.1.1 to T90.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 91

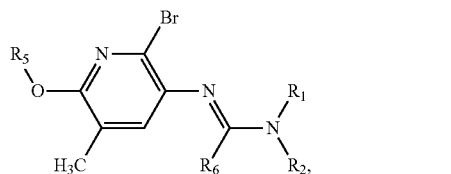
This table discloses the 1201 compounds T91.1.1 to T91.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 92

This table discloses the 1201 compounds T92.1.1 to T92.1.1201 of the formula

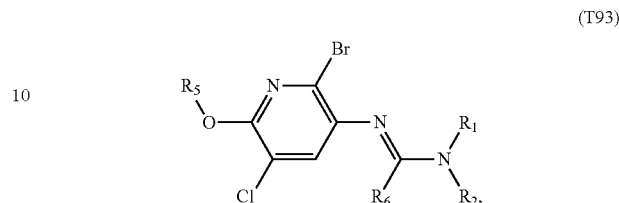


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 93

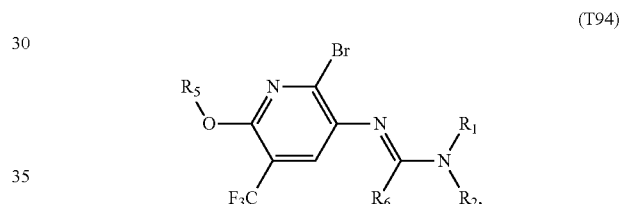
This table discloses the 1201 compounds T93.1.1 to T93.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 94

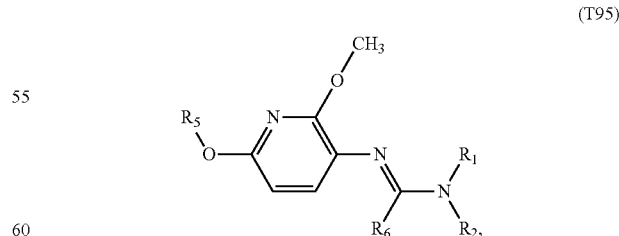
This table discloses the 1201 compounds T94.1.1 to T94.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 95

This table discloses the 1201 compounds T95.1.1 to T95.1.1201 of the formula

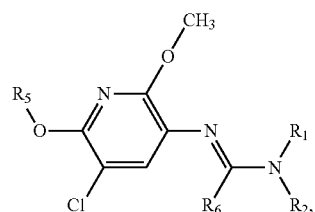


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 96

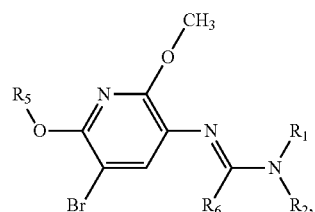
This table discloses the 1201 compounds
T96.1.1 to T96.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 97

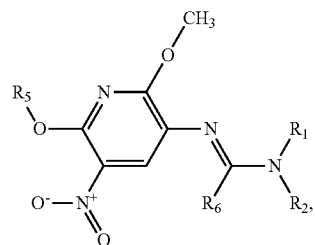
This table discloses the 1201 compounds
T97.1.1 to T97.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 98

This table discloses the 1201 compounds
T98.1.1 to T98.1.1201 of the formula

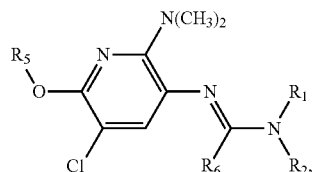


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 99

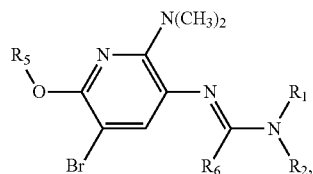
This table discloses the 1201 compounds
T99.1.1 to T99.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 100

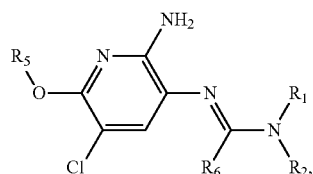
This table discloses the 1201 compounds
T100.1.1 to T100.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 101

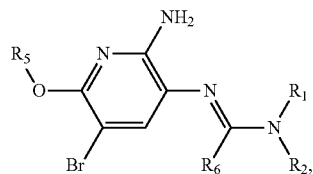
This table discloses the 1201 compounds
T101.1.1 to T101.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 102

This table discloses the 1201 compounds
T102.1.1 to T102.1.1201 of the formula

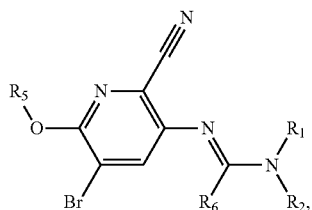


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in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 103

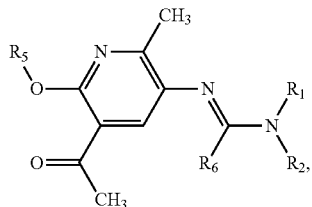
This table discloses the 1201 compounds
T103.1.1 to T103.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 104

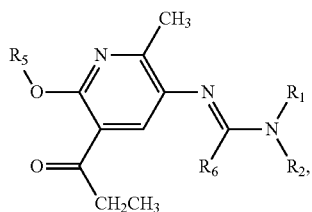
This table discloses the 1201 compounds
T104.1.1 to T104.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 105

This table discloses the 1201 compounds
T105.1.1 to T105.1.1201 of the formula

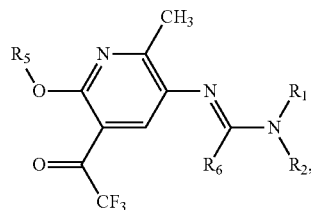


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 106

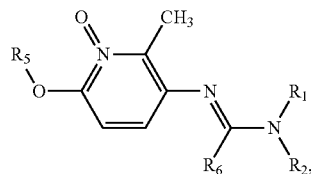
This table discloses the 1201 compounds
T106.1.1 to T106.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 107

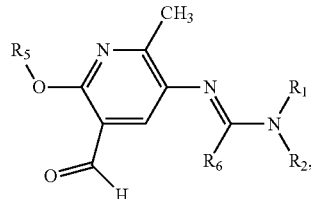
This table discloses the 1201 compounds
T107.1.1 to T107.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 108

This table discloses the 1201 compounds
T108.1.1 to T108.1.1201 of the formula



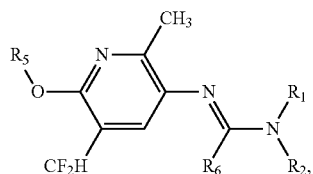
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 109

This table discloses the 1201 compounds
T109.1.1 to T109.1.1201 of the formula

(T109)

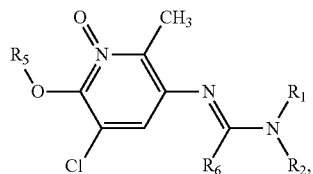


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 110

This table discloses the 1201 compounds
T110.1.1 to T110.1.1201 of the formula

(T110)

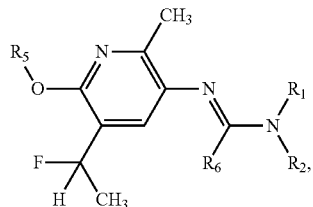


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 111

This table discloses the 1201 compounds
T111.1.1 to T111.1.1201 of the formula

(T111)



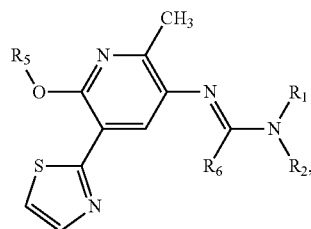
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 112

This table discloses the 1201 compounds
T112.1.1 to T112.1.1201 of the formula

(T112)

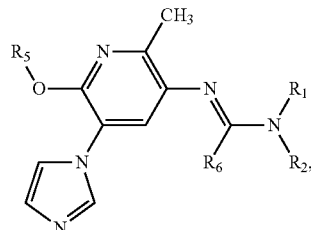


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 113

This table discloses the 1201 compounds
T113.1.1 to T113.1.1201 of the formula

(T113)

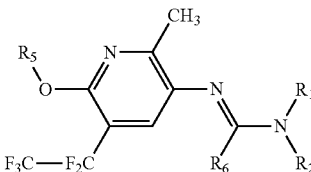


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 114

This table discloses the 1201 compounds
T114.1.1 to T114.1.1201 of the formula

(T114)



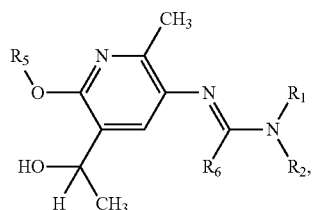
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 115

This table discloses the 1201 compounds
T115.1.1 to T115.1.1201 of the formula

(T115)

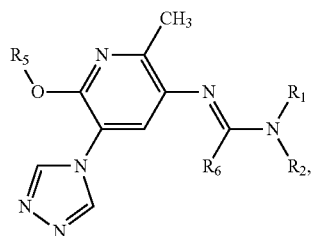


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 116

This table discloses the 1201 compounds
T116.1.1 to T116.1.1201 of the formula

(T116)

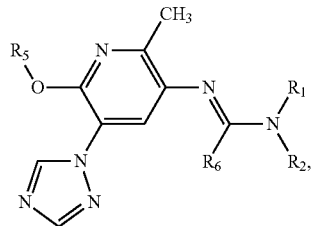


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 117

This table discloses the 1201 compounds
T117.1.1 to T117.1.1201 of the formula

(T117)



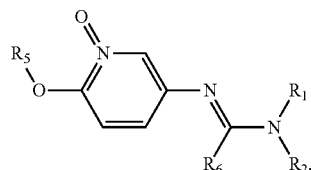
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 118

This table discloses the 1201 compounds
T118.1.1 to T118.1.1201 of the formula

(T118)

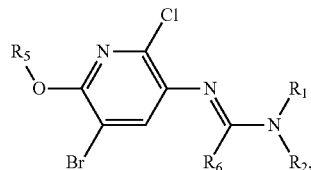


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 119

This table discloses the 1201 compounds
T119.1.1 to T119.1.1201 of the formula

(T119)

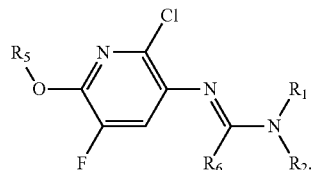


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 120

This table discloses the 1201 compounds
T120.1.1 to T120.1.1201 of the formula

(T120)

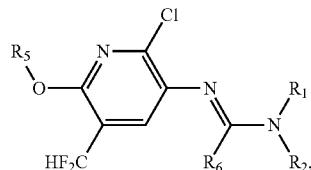


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 121

This table discloses the 1201 compounds
T121.1.1 to T121.1.1201 of the formula

(T121)

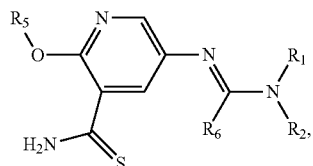


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in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 122

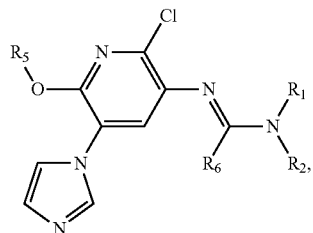
This table discloses the 1201 compounds
T122.1.1 to T122.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 123

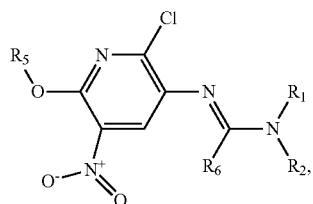
This table discloses the 1201 compounds
T123.1.1 to T123.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 124

This table discloses the 1201 compounds
T124.1.1 to T124.1.1201 of the formula

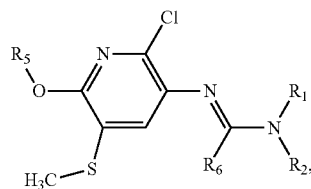


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 125

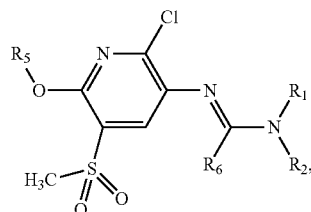
This table discloses the 1201 compounds
T125.1.1 to T125.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 126

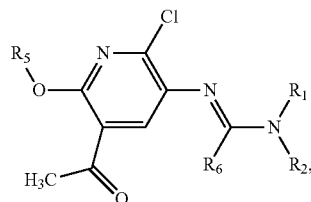
This table discloses the 1201 compounds
T126.1.1 to T126.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 127

This table discloses the 1201 compounds
T127.1.1 to T127.1.1201 of the formula



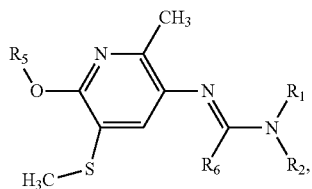
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

509

TABLE 128

This table discloses the 1201 compounds
T128.1.1 to T128.1.1201 of the formula

(T128)

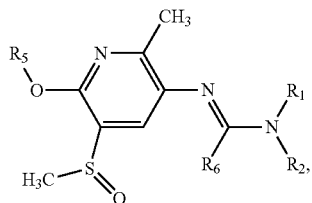


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 129

This table discloses the 1201 compounds
T129.1.1 to T129.1.1201 of the formula

(T129)

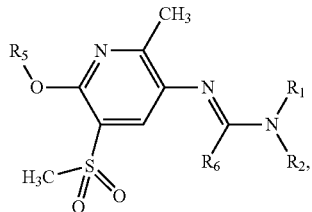


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 130

This table discloses the 1201 compounds
T130.1.1 to T130.1.1201 of the formula

(T130)



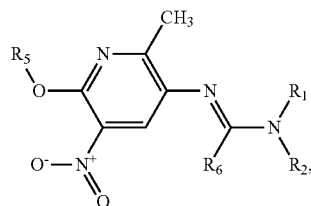
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 131

This table discloses the 1201 compounds
T131.1.1 to T131.1.1201 of the formula

(T131)

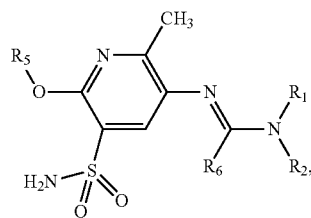


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 132

This table discloses the 1201 compounds
T132.1.1 to T132.1.1201 of the formula

(T132)

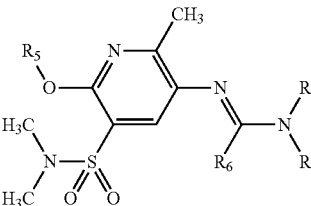


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 133

This table discloses the 1201 compounds
T133.1.1 to T133.1.1201 of the formula

(T133)



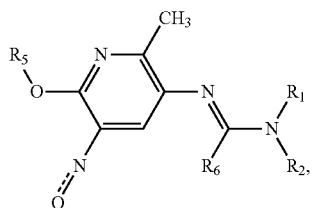
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 134

This table discloses the 1201 compounds
T134.1.1 to T134.1.1201 of the formula

(T134)

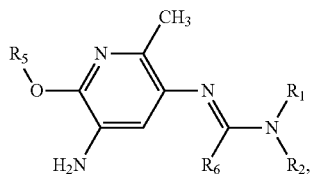


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 135

This table discloses the 1201 compounds
T135.1.1 to T135.1.1201 of the formula

(T135)

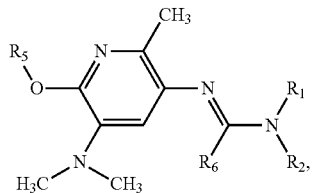


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 136

This table discloses the 1201 compounds
T136.1.1 to T136.1.1201 of the formula

(T136)



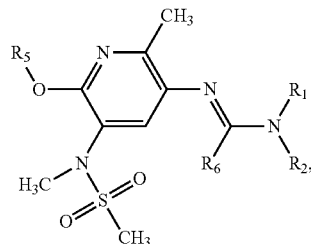
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 137

This table discloses the 1201 compounds
T137.1.1 to T137.1.1201 of the formula

(T137)

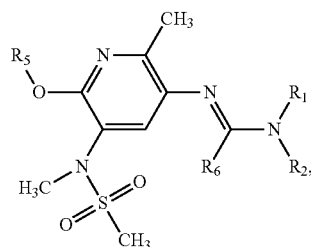


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 138

This table discloses the 1201 compounds
T138.1.1 to T138.1.1201 of the formula

(T138)

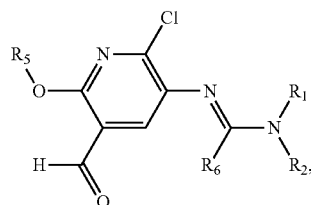


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 139

This table discloses the 1201 compounds
T139.1.1 to T139.1.1201 of the formula

(T139)

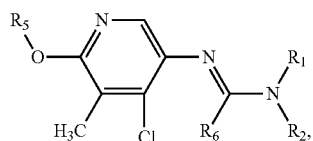


in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 140

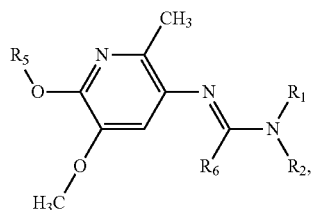
This table discloses the 1201 compounds
T140.1.1 to T140.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 141

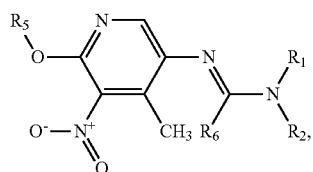
This table discloses the 1201 compounds
T141.1.1 to T141.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 142

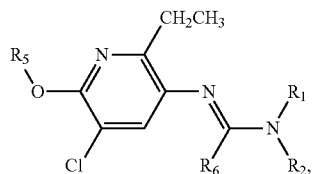
This table discloses the 1201 compounds
T142.1.1 to T142.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 143

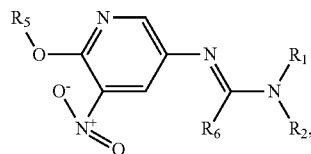
This table discloses the 1201 compounds
T143.1.1 to T143.1.1201 of the formula



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TABLE 144

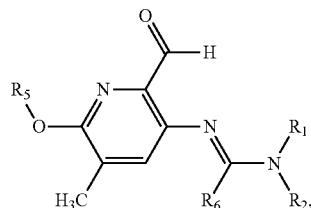
This table discloses the 1201 compounds
T144.1.1 to T144.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 145

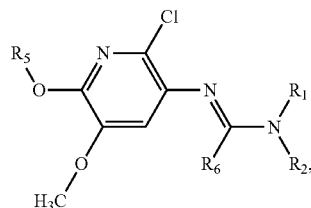
This table discloses the 1201 compounds
T145.1.1 to T145.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 146

This table discloses the 1201 compounds
T146.1.1 to T146.1.1201 of the formula



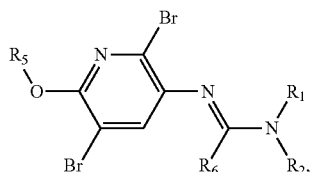
in which, for each of these 1201 specific compounds, each of the variables R_1 , R_2 , R_5 and R_6 has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 147

This table discloses the 1201 compounds
T147.1.1 to T147.1.1201 of the formula

(T147)

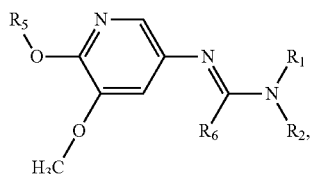


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 148

This table discloses the 1201 compounds
T148.1.1 to T148.1.1201 of the formula

(T148)

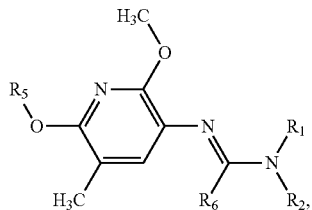


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 149

This table discloses the 1201 compounds
T149.1.1 to T149.1.1201 of the formula

(T149)



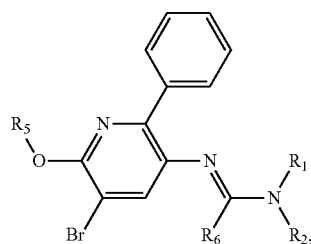
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 150

This table discloses the 1201 compounds
T150.1.1 to T150.1.1201 of the formula

(T150)

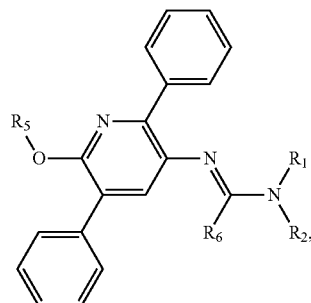


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 151

This table discloses the 1201 compounds
T151.1.1 to T151.1.1201 of the formula

(T151)

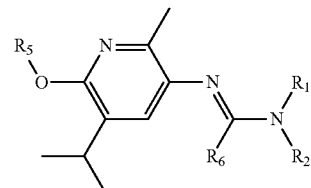


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 152

This table discloses the 1201 compounds
T152.1.1 to T152.1.1201 of the formula

(T152)



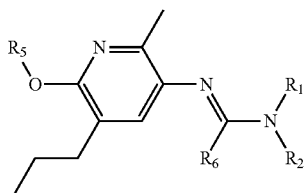
in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 153

This table discloses the 1201 compounds
T153.1.1 to T153.1.1201 of the formula

(T153)

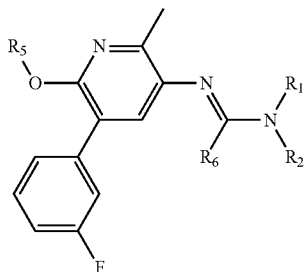


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 154

This table discloses the 1201 compounds
T154.1.1 to T154.1.1201 of the formula

(T154)

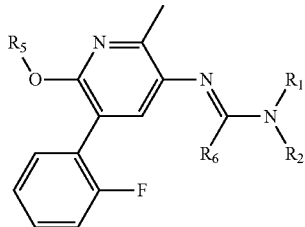


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 155

This table discloses the 1201 compounds
T155.1.1 to T155.1.1201 of the formula

(T155)



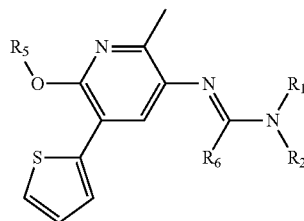
in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 156

This table discloses the 1201 compounds
T156.1.1 to T156.1.1201 of the formula

(T156)

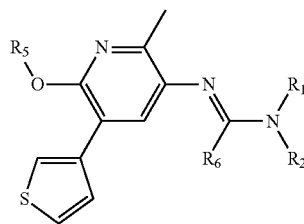


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 157

This table discloses the 1201 compounds
T157.1.1 to T157.1.1201 of the formula

(T157)

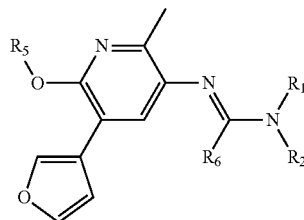


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 158

This table discloses the 1201 compounds
T158.1.1 to T158.1.1201 of the formula

(T158)

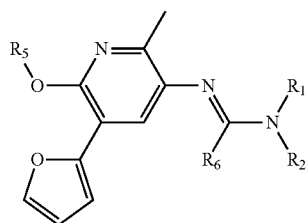


in which, for each of these 1201 specific compounds, each
of the variables R₁, R₂, R₅ and R₆ has the specific meaning
given in the corresponding line, appropriately selected from
the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 159

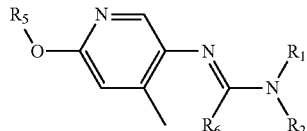
This table discloses the 1201 compounds
T159.1.1 to T159.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 160

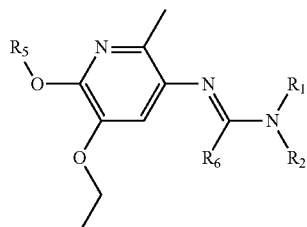
This table discloses the 1201 compounds
T160.1.1 to T160.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 161

This table discloses the 1201 compounds
T161.1.1 to T161.1.1201 of the formula

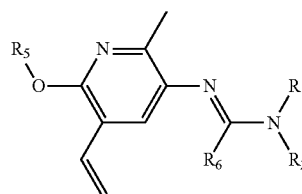


in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

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TABLE 162

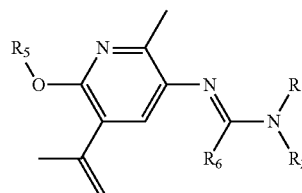
This table discloses the 1201 compounds
T162.1.1 to T162.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

TABLE 163

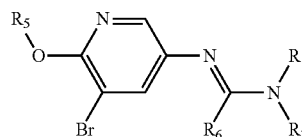
This table discloses the 1201 compounds
T163.1.1 to T163.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

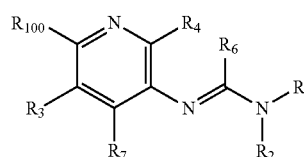
TABLE 164

This table discloses the 1201 compounds
T164.1.1 to T164.1.1201 of the formula



in which, for each of these 1201 specific compounds, each of the variables R₁, R₂, R₅ and R₆ has the specific meaning given in the corresponding line, appropriately selected from the 1201 lines A.1.1 to A.1.1201 of Table A.

In further embodiments the invention provides novel intermediates to provide compounds according to formula (I) are compounds of formula (IV)

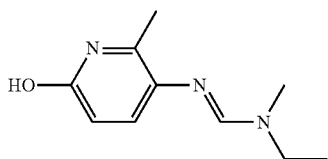


wherein R₁₀₀ is halogen, SH, C₁-C₄-alkylthio, C₁-C₄-alkylsulfinyl, C₁-C₄-alkylsulfonyl and R₁, R₂, R₃, R₄, R₆ and R₇ are as described herein for compounds of formula (I).

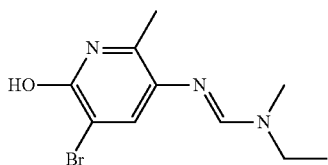
521

The Following Table Provides a Selection of Compounds of Formula (IV)

R.01

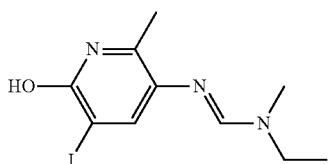


R.02

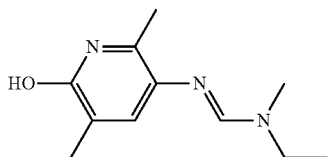


Mp:
168-170° C.

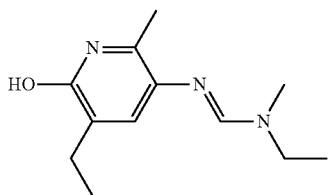
R.03



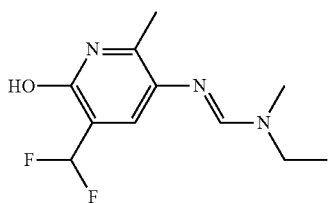
R.04



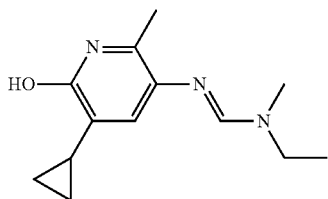
R.05



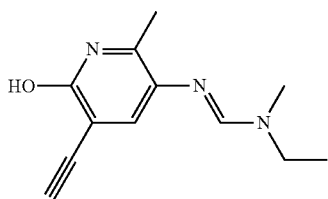
R.06



R.07



R.08

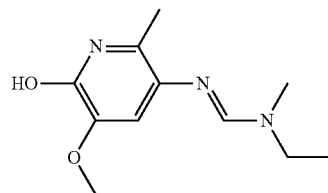


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R.09

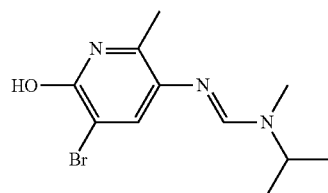
5



10

R.10

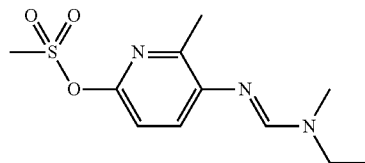
15



20

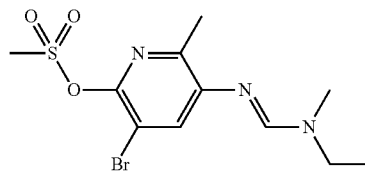
R.11

25



R.12

30

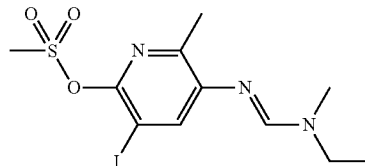


Mp:
85-87° C.

35

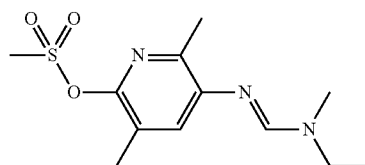
R.13

40



R.14

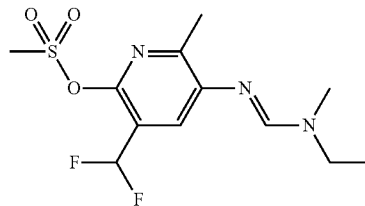
45



50

R.15

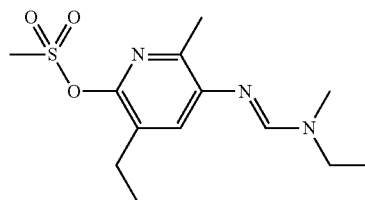
55



60

R.16

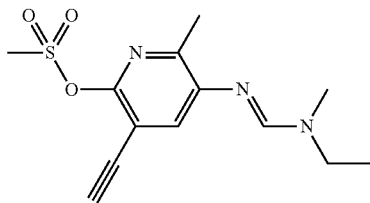
65



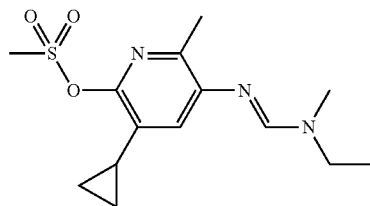
523

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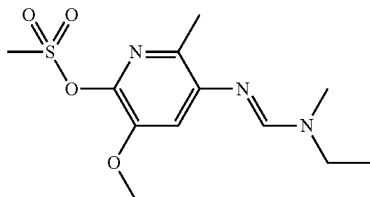
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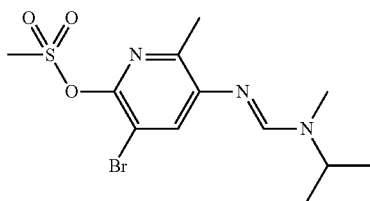
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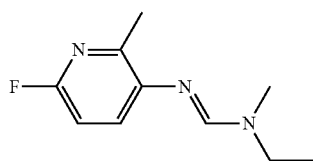
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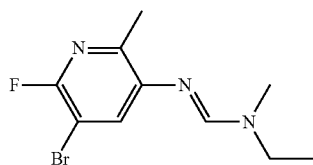
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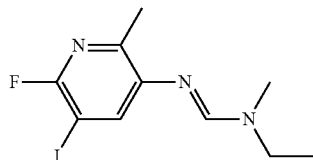
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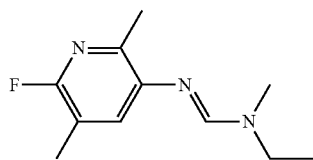
R.22



R.23



R.24

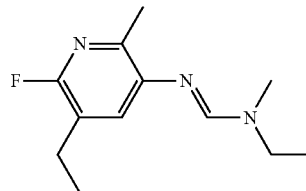


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R.25

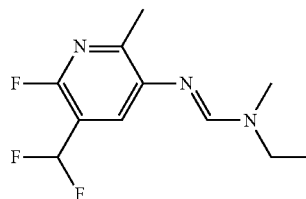
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R.26

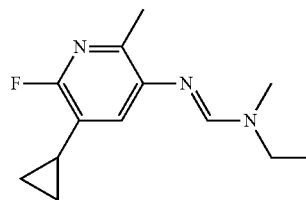
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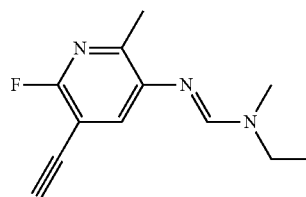
R.27

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R.28

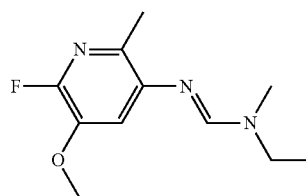
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R.29

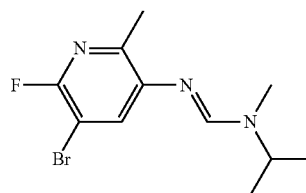
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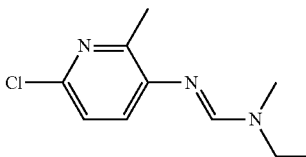
R.30

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R.31

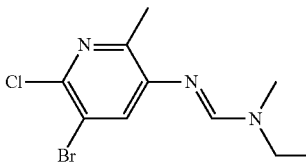
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R.32

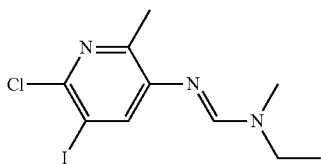
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Oil;
(M + 1)⁺
290

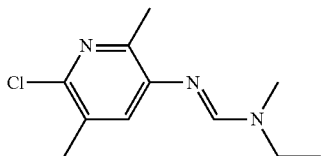
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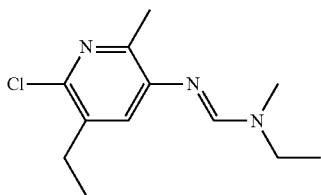
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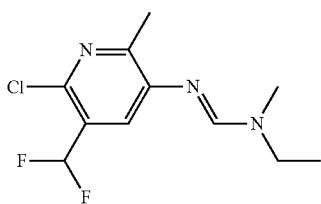
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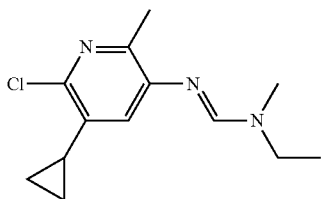
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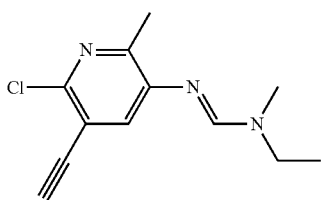
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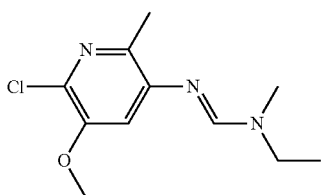
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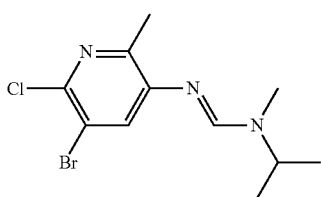
R.38



R.39



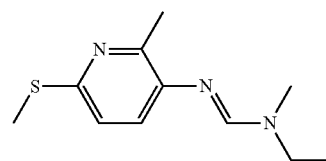
R.40

**526**

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R.41

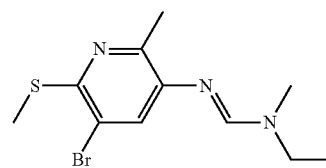
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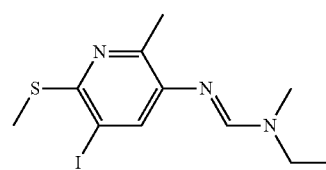
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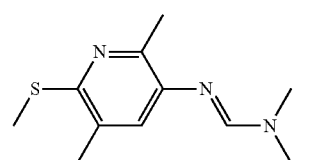
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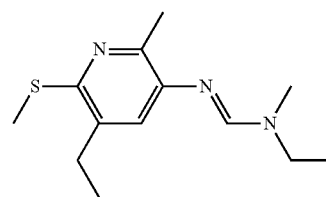
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R.45

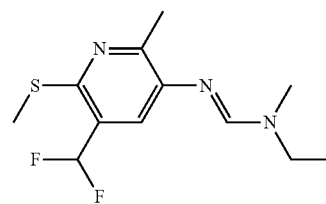
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R.46

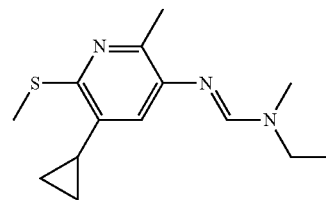
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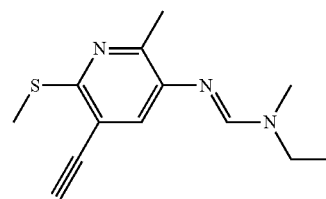
R.47

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R.48

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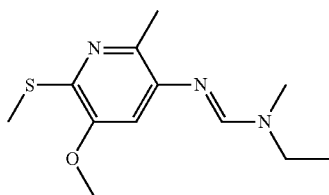


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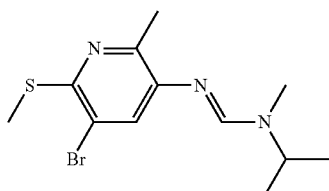
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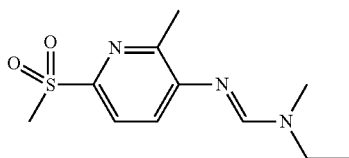
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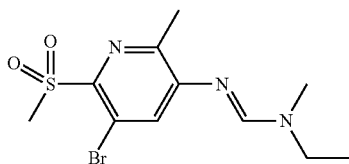
R.50



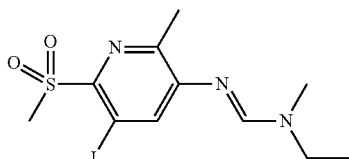
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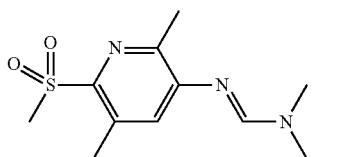
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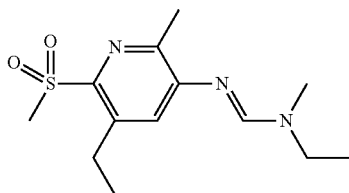
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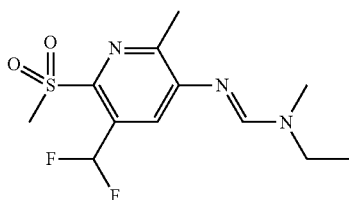
R.54



R.55



R.56

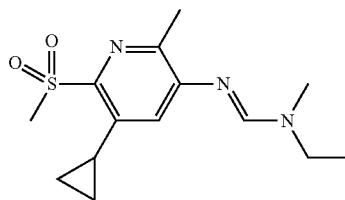


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R.57

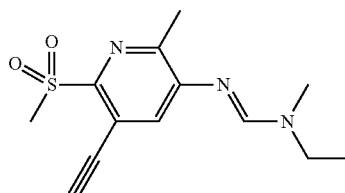
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R.58

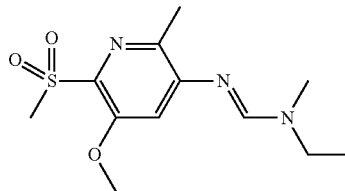
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R.59

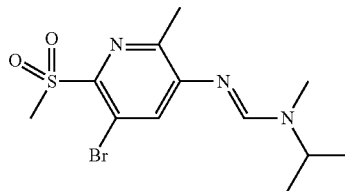
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R.60

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The active compounds of component B are known e.g. from the Pesticide Manual (British Crop Protection Council). N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide has the Chemical Abstracts Registry Number [1072957-71-1]. The compound of formula (II) has the Chemical Abstracts Registry Number [173662-97-0]. The compounds (S)-[3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)isoxazol-4-yl]pyridin-3-yl-methanol, 3-(4-Chloro-2-fluoro-phenyl)-5-(2,4-difluoro-phenyl)isoxazol-4-yl]pyridin-3-yl-methanol are found in WO2010069881.

The active ingredient mixture of the compounds of formula I selected from tables T1 to T164 or a specific compound selected from P.1 to P.372 with active ingredients described above comprises a compound selected from tables T1 to T164 and an active ingredient as described above preferably in a mixing ratio of from 100:1 to 1:6000, especially from 50:1 to 1:500, more especially in a ratio of from 20:1 to 1:200, even more especially from 10:1 to 1:100, very especially from 5:1 to 1:50, special preference being given to a ratio of from 3:1 to 1:10, and a ratio of from 3:1 to 1:5 being likewise preferred, above all in a ratio of 1:1, or 5:1, or 5:2, or 5:3, or 5:4, or 4:1, or 4:2, or 4:3, or 3:1, or 3:2, or 2:1, or 1:5, or 2:5, or 3:5, or 4:5, or 1:4, or 2:4, or 3:4, or 1:3, or 2:3, or 1:2, or 1:600, or 1:300, or 1:150, or 1:35, or 2:35, or 4:35, or 1:75, or 2:75, or 4:75, or 1:6000, or 1:3000, or 1:1500, or 1:350, or 2:350, or 4:350, or 1:750, or 2:750, or 4:750. Those mixing ratios are understood to include, on the one hand, ratios by weight and also, on other hand, molar ratios.

The mixtures comprising a compound of formula I e.g. selected from tables T1 to T164 or a specific compound

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selected from P.1 to P.372 and one or more active ingredients as described above can be applied, for example, in a single "ready-mix" form, in a combined spray mixture composed from separate formulations of the single active ingredient components, such as a "tank-mix", and in a combined use of the single active ingredients when applied in a sequential manner, i.e. one after the other with a reasonably short period, such as a few hours or days. The order of applying the compounds of formula I e.g. those selected from tables T1 to T164 and the active ingredients as described above is not essential for working the present invention.

A synergistic effect exists whenever the action of an active ingredient combination is greater than the sum of the actions of the individual components.

The action to be expected E for a given active ingredient combination obeys the so-called COLBY formula and can be calculated as follows (COLBY, S. R. "Calculating synergistic and antagonistic responses of herbicide combination". Weeds, Vol. 15, pages 20-22; 1967):

ppm=milligrams of active ingredient (=a.i.) per liter of spray mixture

X=% action by active ingredient A) using p ppm of active ingredient

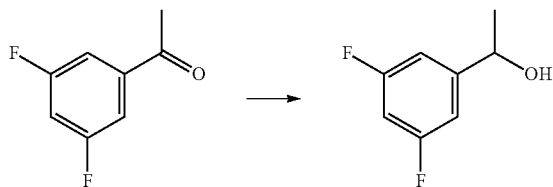
Y=% action by active ingredient B) using q ppm of active ingredient. According to COLBY, the expected (additive) action of active ingredients A)+B) using p+q ppm of active ingredient is

$$E = X + Y - \frac{X \cdot Y}{100}$$

If the action actually observed (O) is greater than the expected action (E), then the action of the combination is super-additive, i.e. there is a synergistic effect. In mathematical terms the synergism factor SF corresponds to O/E. In the agricultural practice an SF of ≥ 1.2 indicates significant improvement over the purely complementary addition of activities (expected activity), while an SF of ≤ 0.9 in the practical application routine signals a loss of activity compared to the expected activity.

EXAMPLES

Preparation of 1-(3,5-difluorophenyl)ethanol



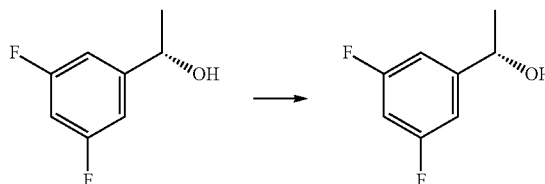
To a colorless stirred solution of 3',5'-difluoroacetophenone (50.00 g, 320.24 mmol) in methanol (320 mL), sodium borohydride (3.41 g, 86.47 mmol, 0.27 eq) was added portion wise over 20 minutes at room temperature under inert atmosphere (Ar). Then the reaction mixture was stirred for 45 min at room temperature and then quenched carefully by the addition of a saturated aqueous ammonium chloride solution (150 mL). The extraction was carried out with ethyl acetate (2x200 mL). The combined organic layers were washed with brine (200 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent

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was removed in vacuo to give the title compound (50.29 g, 99%) as a colorless oil. The alcohol was used as such in the subsequent step.

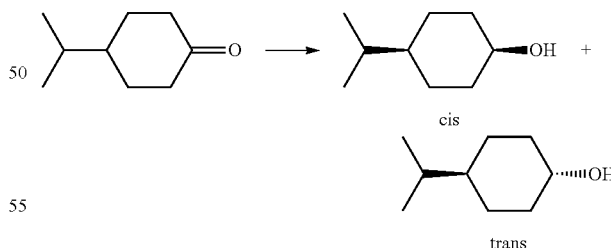
TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.27.

Preparation of (-)-(S)-1-(3,5-difluorophenyl)ethanol



To a stirred solution of (-)-DIP-Cl ((-)-diisopinocampheylboron chloride) (2.67 g, 8.33 mmol, 1.3 eq) in THF (20 mL) kept under inert atmosphere (Ar) and cooled to -27° C. to -25° C., 3',5'-difluoroacetophenone (1.00 g, 6.40 mmol) was added drop wise over 2 min. The reaction was maintained at this temperature for 17 h. The reaction mixture was then treated with acetaldehyde (0.44 mL, 7.69 mmol, 1.2 eq). Thereafter, the temperature was allowed to reach room temperature and the reaction mixture was stirred at for 7 h. The solvent was then removed in vacuo and the resulting residue was partitioned between water (10 mL) and TBME (tert-butyl-methyl ether) (20 mL). The aqueous phase was extracted again with TBME (20 mL). The organic layer was washed with an aqueous 2 N NaOH solution (20 mL), brine (20 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a residue, which was purified by two subsequent column chromatographic steps: First by normal phase chromatography (silica gel, heptane/ethyl acetate, v/v=1/0-9/1) followed by a reversed phase chromatography (90 C₁₈-silica gel, acetonitrile for the second one). This gave the title compound (0.40 g, 40%) as a colorless oil with a specific rotation of $[\alpha]^{25}_D = -26.66$ (c=1.054 g/100 mL, CH₂Cl₂, 589 nm).

Preparation of cis and trans 4-isopropylcyclohexanol



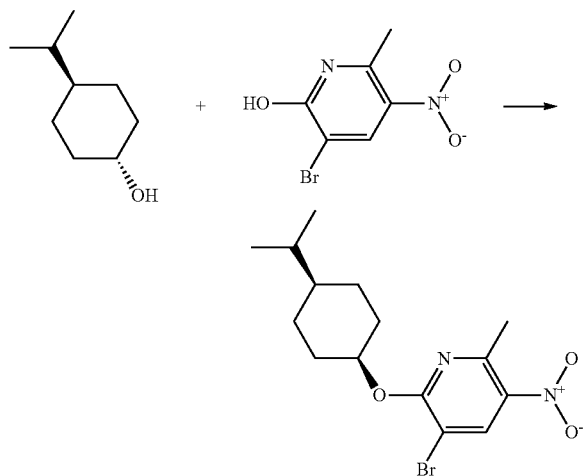
To a stirred solution of 4-isopropylcyclohexanone (10.00 g, 68.46 mmol) in tert-butyl methyl ether (136 mL) cooled to 7° C. (cooling bath with a cyclohexane/liquid nitrogen slurry), a 1.00 M solution of lithium aluminium hydride in THF (23 mL, 22.59 mmol, 0.33 eq) was added drop wise over 35 minutes while keeping the temperature in the range of 7 to 10° C. Stirring was continued under these conditions. The reaction mixture was then allowed to reach room temperature and stirred at this temperature for an additional 40 minutes. It

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was then carefully quenched by the slow addition of water (20 mL), followed by a one molar aqueous sulfuric acid solution (60 mL). The extraction was carried out with tert-butyl methyl ether (2×50 mL). The organic layer was washed with a saturated aqueous Na₂CO₃ solution (80 mL), brine (80 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a residue, which was purified by column chromatography (silica gel, heptane/ethyl acetate, v/v=1/0–9/1). Fractions containing the pure compounds were collected and concentrated in vacuo to give pure trans (6.91 g, 71%) and the pure cis isomer (0.68 g, 5%) of 4-isopropylcyclohexanol both as colourless oils.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, detection by spraying with Mo—Ce reagent, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of cis 4-isopropylcyclohexanol=0.20; R_f of trans 4-isopropylcyclohexanol=0.15.

Preparation of 3-bromo-2-(cis-4-isopropylcyclohexoxy)-6-methyl-5-nitro-pyridine

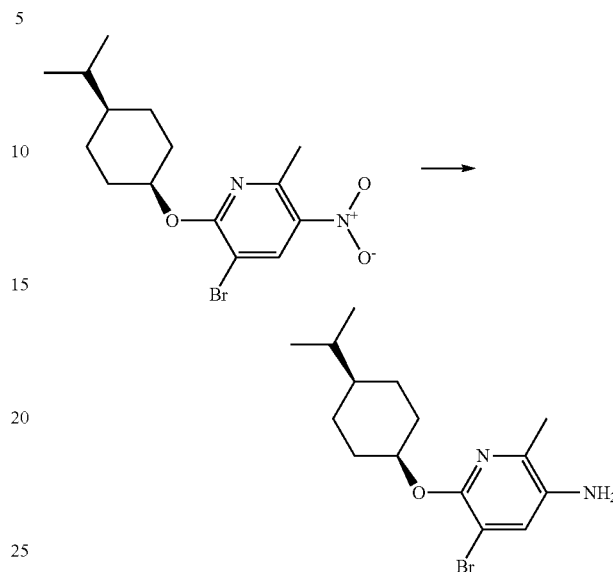


To a stirred suspension of 3-bromo-6-methyl-5-nitro-pyridin-2-ol (23.65 g, 101.5 mmol) in THF (180 mL), trans isopropylcyclohexanol (14.44 g, 101.5 mmol, 1.0 eq) and triphenylphosphine (32.27 g, 121.8 mmol, 1.2 eq) were added at room temperature under inert atmosphere (Ar). To this mixture, DIAD (diisopropyl diazodicarboxylate) (25.51 mL, 121.8 mmol, 1.2 eq) was added drop wise over 45 min while keeping the temperature below 45° C. Then, the reaction mixture was stirred for 5 h under heating to reflux. TLC indicated that the starting material was consumed. The reaction mixture was therefore allowed to reach room temperature and it was quenched by the addition of water (250 mL). The extraction was carried out with ethyl acetate (3×200 mL). The organic layer was washed with brine (300 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a residue, which was purified by column chromatography (silica gel, heptane/ethyl acetate, v/v=1/0–98/2). Fractions containing the pure compound were collected and concentrated in vacuo to give title compound (22.59 g, 62%) in the form of an oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.64.

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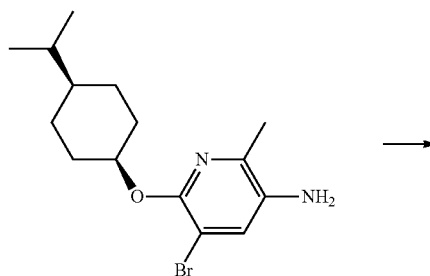
Preparation of 5-bromo-6-(cis-4-isopropylcyclohexoxy)-2-methyl-pyridin-3-amine



To a stirred solution of 3-bromo-2-(cis-4-isopropylcyclohexoxy)-6-methyl-5-nitro-pyridine (22.59 g, 63.24 mmol) in EtOH/H₂O (600 mL/150 mL, 4/1 v/v), ammonium chloride (3.45 g, 63.24 mmol, 1.0 eq) and iron powder (14.27 g, 253.0 mmol, 4 eq) were added at room temperature under inert atmosphere (Ar). The reaction mixture was stirred for 3 h under heating to reflux. As TLC indicated that the starting material was consumed at this point in time, the reaction mixture was cooled to room temperature and filtered through a pad of celite. The resulting filtrate was concentrated in vacuo and the residue partitioned between a 2 molar aqueous NaOH solution (100 mL) and ethyl acetate (150 mL). After phase separation, the aqueous phase was extracted once more with ethyl acetate (2×100 mL). The organic layer was washed with brine (400 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to afford the title compound (21.01 g, 101%) in the form of an oil.

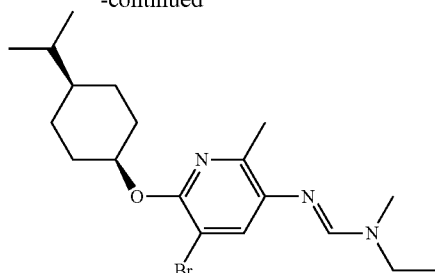
TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.19.

Preparation of N'-[5-bromo-6-(cis-4-isopropylcyclohexoxy)-2-methyl-3-pyridyl]-N-ethyl-N-methyl formamide



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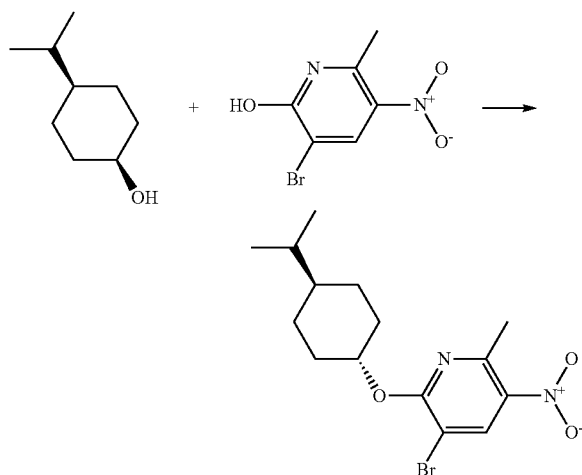


The Vilsmeier reagent was freshly prepared by the slow addition of phosphorus oxychloride (7.09 mL, 75.89 mmol, 1.2 eq) to a solution of N,N-ethylmethylformamide (6.61 g, 75.89 mmol, 1.2 eq) in dichloromethane (75 mL) at room temperature. After the addition was complete, the reaction mixture was stirred at room temperature for 1 h. The Vilsmeier reagent was then added drop wise over 40 min to a solution of 5-bromo-6-(cis-4-isopropylcyclohexoxy)-2-methylpyridin-3-amine (20.70 g, 63.24 mmol) in dichloromethane (225 mL) at room temperature under inert atmosphere (Ar). Stirring was continued for 1.5 h at room temperature. The reaction mixture was then quenched by the addition of water (100 mL) and the pH was adjusted to 14 by the addition of a 2.0 molar aqueous NaOH solution (80 mL). The phases were separated and the aqueous phase extracted with dichloromethane (2×100 mL). The organic layer was washed with brine (250 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a residue, which was purified by column chromatography (silica gel, heptane/ethyl acetate, v/v=1/0-4/1). Fractions containing the pure compound were collected and concentrated in vacuo to give the title compound (20.23 g, 81%) as a yellow oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.29.

¹H NMR (400 MHz, CDCl₃): δ (ppm)=7.45-7.30 (broad s, 1H), 7.23 (s, 1H), 5.32-5.28 (m, 1H), 3.55-3.24 (broad s, 2H), 2.98 (s, 3H), 2.35 (s, 3H), 2.04-2.01 (m, 2H), 1.63-1.46 (m, 7H), 1.20 (t, 3H), 1.18-1.10 (m, 1H), 0.91-0.89 (d, 6H).

Preparation of 3-bromo-2-(trans-4-isopropylcyclohexoxy)-6-methyl-5-nitro-pyridine

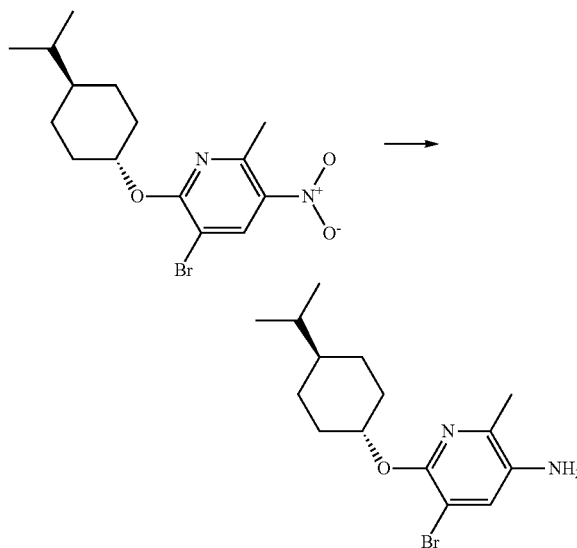


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To a stirred suspension of 3-bromo-6-methyl-5-nitro-pyridin-2-ol (2.00 g, 8.58 mmol) in THF (8.6 mL), cis isopropylcyclohexanol (1.44 g, 8.58 mmol, 1.0 eq) and triphenylphosphine (2.73 g, 10.30 mmol, 1.2 eq) were added at room temperature under inert atmosphere (Ar). To this mixture, DIAD (diisopropyl diazodicarboxylate) (2.16 mL, 10.30 mmol, 1.2 eq) was added drop wise over 10 minutes while keeping the temperature below 40° C. The reaction mixture was stirred for 1.5 h under heating to. After this point in time, TLC indicated consumption of the starting material and the reaction mixture was allowed to reach room temperature and was quenched by adding water (20 mL). The water phase was extracted with ethyl acetate (3×20 mL). The organic layer was washed with brine (35 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a residue, which was purified by column chromatography (silica gel, heptane/ethyl acetate, v/v=1/0-9/1). Fractions containing the pure compound were collected and concentrated in vacuo to give the title compound (0.94 g, 30%) as an oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.65.

Preparation of 5-bromo-6-(trans-4-isopropylcyclohexoxy)-2-methylpyridin-3-amine

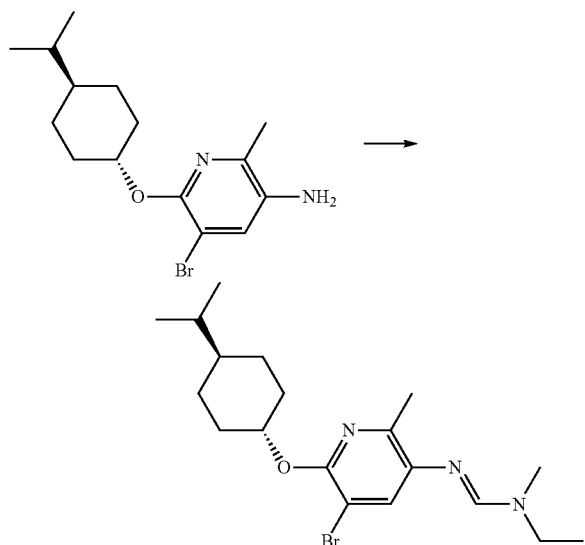


To a stirred solution of 3-bromo-2-(trans-4-isopropylcyclohexoxy)-6-methyl-5-nitro-pyridine (0.917 g, 2.00 mmol) in EtOH/H₂O (24 mL/6 mL, 4/1 v/v), ammonium chloride (0.109 g, 2.00 mmol, 1.0 eq) and iron powder (0.452 g, 8.00 mmol, 4 eq) were added at room temperature under inert atmosphere (Ar). The reaction mixture was stirred under heating to reflux for 3 h. At this point in time, TLC indicated that the starting material was consumed. Therefore, the reaction mixture was allowed to reach room temperature and was filtered through a pad of celite. The filtrate was concentrated under reduced pressure and the residue partitioned between a 2 molar aqueous NaOH solution (20 mL) and ethyl acetate (30 mL). The phases were separated and the aqueous phase extracted with ethyl acetate (2×20 mL). The organic layer was washed with brine (40 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to afford the title compound (0.658 g, 100%) as an oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.19.

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Preparation of 5-bromo-6-(trans-4-isopropylcyclohexoxy)-2-methyl-pyridin-3-amine

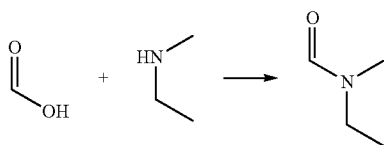


The Vilsmeier reagent was freshly prepared by the slow addition of phosphorus oxychloride (0.101 mL, 1.08 mmol, 1.2 eq) to a solution of N,N-ethylmethylformamide (0.094 g, 1.08 mmol, 1.2 eq) in dichloromethane (0.5 mL) at room temperature. After the addition was complete, the reaction mixture was stirred at room temperature for 1 h. Then the Vilsmeier reagent thus obtained was added drop wise to a solution of 5-bromo-6-(trans-4-isopropylcyclohexoxy)-2-methyl-pyridin-3-amine (0.295 g, 0.90 mmol) in dichloromethane (1.0 mL) at room temperature under inert atmosphere (Ar). Stirring was continued for 1.5 h at room temperature. The reaction was then quenched by the addition of a 2 molar aqueous NaOH solution (5 mL). The phases were separated and the aqueous phase extracted with dichloromethane (2×10 mL). The organic layer was washed with brine (10 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a residue, which was purified by column chromatography (silica gel, heptane/ethyl acetate, v/v=1/0-4/1). Fractions containing the pure compound were collected and concentrated in vacuo to give the title compound (0.191 g, 54%) as a light yellow oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.29.

¹H NMR (400 MHz, CDCl₃): δ (ppm)=7.45-7.30 (broad s, 1H), 7.22 (s, 1H), 4.93-4.85 (m, 1H), 3.55-3.22 (broad s, 2H), 2.98 (s, 3H), 2.35 (s, 3H), 2.19-2.15 (m, 2H), 1.80-1.77 (m, 2H), 1.50-1.09 (m, 5H), 1.28 (t, 3H), 0.88-0.86 (d, 6H).

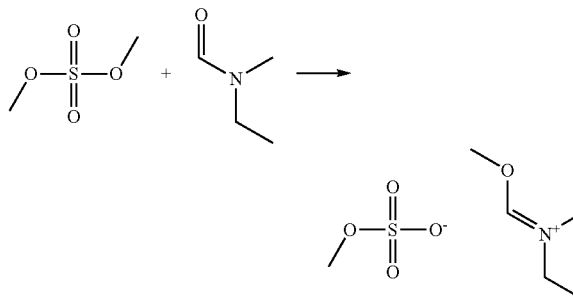
Preparation of N-Ethyl-N-methyl-formamide



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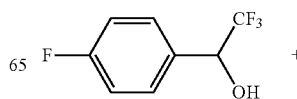
113 g (1.912 mol) of ethylmethylamine was dissolved in 500 mL of dry toluene. 75.86 mL of formic acid (92.2 g, 2.01 mol) was added drop-wise over 20 minutes. Hereby, an exothermic reaction was observed. The temperature was kept below 35° C. by cooling with an ice-water cooling bath. The turbid solution was stirred under heating to reflux (bath temperature of 175° C.) and the water removed using a Dean and Stark separator. 46 mL of water phase was thus separated. This water phase was extracted with 50 mL of ethyl acetate. And this ethyl acetate solution was added to the reaction mixture, after this one was allowed to reach room temperature. After evaporation of the solvent, the resulting liquid was subjected to a fractionating column distillation (Widmer column) at 80 mbar. 138 g of a colourless liquid of bp=95-96° C. was collected. As this material was contaminated with formic acid, the liquid was taken up in 1.0 L of ethyl acetate and kept over K₂CO₃ (occasional stirring, 24 h overall). The solution was then filtered and washed with water and the organic phase was again subjected to the distillation procedure mentioned before. This gave 130.4 g of the title compound as a liquid (bp=95-96° C., 80 mbar).

Preparation of methoxyethylmethyl-methanaminium methyl sulfate

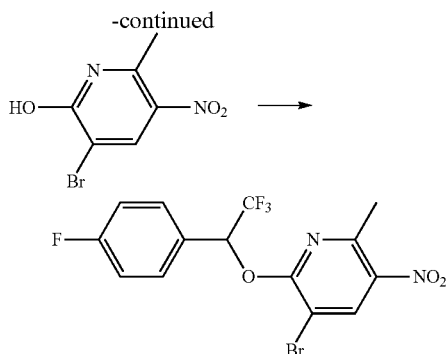


128 g of N-ethyl-N-methyl-formamide was added slowly to 139 mL (185 g, 1.469 mol) of dimethyl sulfate (the dimethyl sulfate used was freshly distilled in vacuo after having been tried over K₂CO₃). The colourless solution was warmed under stirring to 50° C. whereupon an exothermic reaction was starting up. The heating bath was removed and the reaction mixture reached a temperature of 86° C. After the exothermicity came to an end, the reaction mixture was stirred at a temperature of 80° C. for an additional 3 hours. Thereafter, the reaction mixture was allowed to reach room temperature. The resulting liquid was then shaken in a separatory funnel first with 100 mL of toluene and, after phase separation, with 100 mL of diethyl ether. Traces of solvents were removed in vacuo (rotovapor) to give 294 g of the title compound in the form of a colourless liquid. The compound was used as such in the subsequent step.

Preparation of 5-Bromo-2-methyl-3-nitro-6-[2,2,2-trifluoro-1-(4-fluorophenyl)ethoxy]pyridine



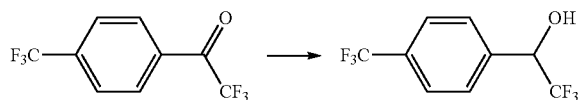
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To a stirred suspension of 3-bromo-6-methyl-5-nitro-pyridin-2-ol (0.10 g, 0.43 mmol) in THF (3 mL), 2,2,2-trifluoro-1-(4-fluorophenyl)ethanol (0.13 g, 0.64 mmol, 1.5 equiv) and triphenylphosphine (0.17 g, 0.64 mmol, 1.5 eq) were added at room temperature under inert atmosphere (Ar). To this mixture, DIAD (diisopropyl diazodicarboxylate) (0.13 mL, 0.64 mmol, 1.5 eq) was added dropwise over 10 minutes while keeping the temperature below 40° C. The reaction mixture was stirred for 6 h under heating at 60° C. After this time, TLC indicated that the starting material had been consumed and the reaction mixture was allowed to reach room temperature before quenching with water (10 mL). The water phase was extracted with ethyl acetate (3×15 mL). The organic layer was washed with brine (20 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a brown residue, which was purified by combiflash column chromatography (silica gel, heptane/ethyl acetate, v/v=95/5). Fractions containing the pure compound were collected and concentrated in vacuo to give the title compound (0.11 g, 62% yield) as a yellow oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 4:1 (v/v); R_f of the title compound=0.65.

Preparation of 2,2,2-Trifluoro-1-[4-(trifluoromethyl)phenyl]ethanol

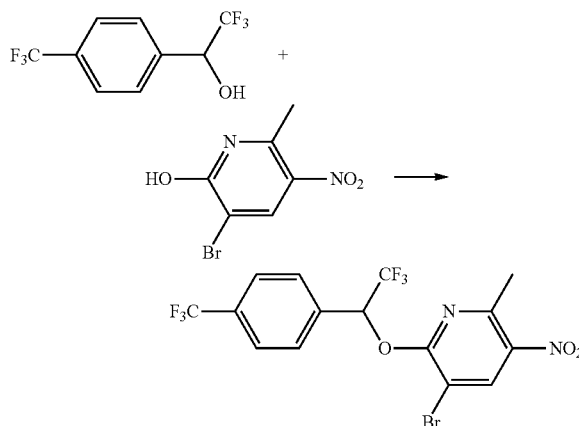


In a 50 mL two-neck flask, 2,2,2-trifluoro-1-[4-(trifluoromethyl)phenyl]ethanone (2.0 g, 8.3 mmol) was dissolved in methanol (8 mL) and sodium borohydride (0.31 g, 8.3 mmol) was added carefully in portions with ice-bath cooling. The resultant colourless solution was stirred at RT for 2 hours and monitored by TLC. Upon the disappearance of all starting material, 5 mL of an aqueous saturated NH₄Cl solution was slowly added to the reaction mixture with additional stirring for 10 min. The later was extracted 3 times with 20 mL of EtOAc and the organic fractions were combined and washed with 10 mL of brine, dried over Na₂SO₄ and filtered. The solvent was removed under reduced pressure to give 2,2,2-trifluoro-1-[4-(trifluoromethyl)phenyl]ethanol (2.13 g, quantitative) as a colourless oil which was used with no further purification.

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TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 2:1 (v/v); R_f of the title compound=0.50.

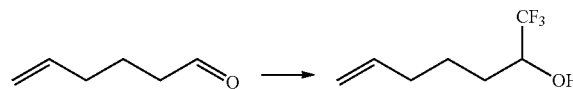
Preparation of 5-Bromo-2-methyl-3-nitro-6-[2,2,2-trifluoro-1-[4-(trifluoromethyl)phenyl]ethoxy]pyridine



To a stirring suspension of 3-bromo-6-methyl-5-nitro-pyridin-2-ol (0.25 g, 1.07 mmol) in THF (7 mL), 2,2,2-trifluoro-1-[4-(trifluoromethyl)phenyl]ethanol (0.39 g, 1.61 mmol, 1.5 equiv) and triphenylphosphine (0.42 g, 1.61 mmol, 1.5 eq) were added at room temperature under inert atmosphere (Ar). To this mixture, DIAD (diisopropyl diazodicarboxylate) (0.33 mL, 1.61 mmol, 1.5 eq) was added dropwise over 10 minutes while keeping the temperature below 40° C. The reaction mixture was stirred for 6 h under heating at 60° C. After this time, TLC indicated that the starting material was consumed and the reaction mixture was allowed to reach room temperature before quenching with water (10 mL). The water phase was extracted with ethyl acetate (2×50 mL). The organic layer was washed with brine (20 mL), dried over anhydrous Na₂SO₄ and filtered. The solvent was removed in vacuo to give a brown residue, which was purified by combiflash column chromatography (silica gel, heptane/ethyl acetate, v/v=95/5). Fractions containing the pure compound were collected and concentrated in vacuo to give the title compound (0.18 g, 41% yield) as a yellow oil.

TLC: Plates: Merck TLC-Plates, silica gel F₂₅₄, saturated atmosphere in developing tank, UV detection, eluent: heptanes/ethyl acetate 2:1 (v/v); R_f of the title compound=0.74.

Preparation of 1,1,1-Trifluorohept-6-en-2-ol



To a ice-bath cooled solution of hex-5-enal (500 mg, 4.331 mmol) and trimethyl(trifluoromethyl)silane (0.74 g, 5.13 mmol, 1.2 equiv.) in THF (10 mL) was added tetrabutylammonium hydrofluoride (10 mg, 0.04 mmol). The ice bath was removed and the reaction progress was monitored via GCMS and 1H NMR. Upon complete transformation of the starting material the reaction mixture was treated with 2M HCl and

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stirred for an additional 2 h. Then, 50 mL of Et₂O was introduced and the layers were separated. The aqueous fraction was additionally extracted with Et₂O and the combined organic phases were washed sequentially with a saturated aqueous NaHCO₃ solution, water, and brine. After drying with MgSO₄ and filtration the solvent was removed under reduced pressure and the resultant crude residue was purified by column chromatography (silica gel, pentane/Et₂O, v/v=8/

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2). Fractions containing the pure compound were collected and concentrated in vacuo to give 1,1,1-trifluorohept-6-en-2-ol (225 mg, 31% yield) as a yellow oil.

Using techniques analogous to those above and further techniques known to the person skilled in the art, for example as found in WO 08/101,682, the compounds found in Table Q were prepared.

TABLE Q

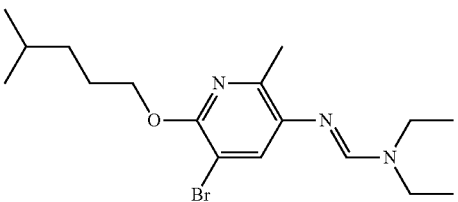
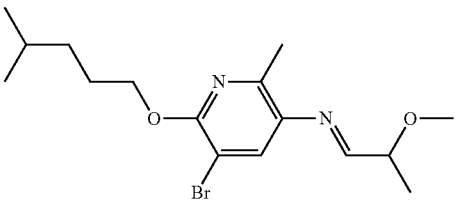
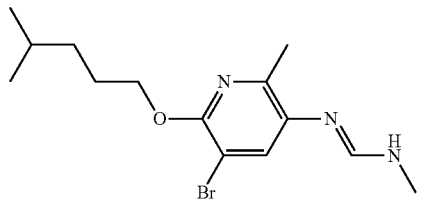
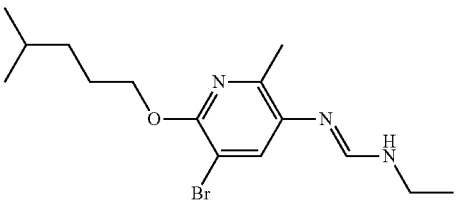
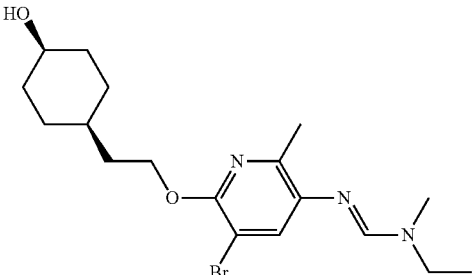
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.001		Method 4: 1.42 min; 370
Q.002		Method 4: . 1.46 min; 358
Q.003		Method 4: 1.30 min; 328
Q.004		Method 4: 1.33 min; 342
Q.005		Method 4: 1.17 min; 398

TABLE Q-continued

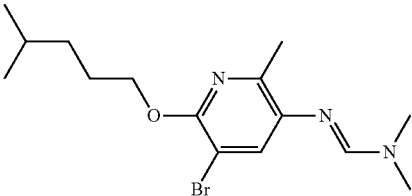
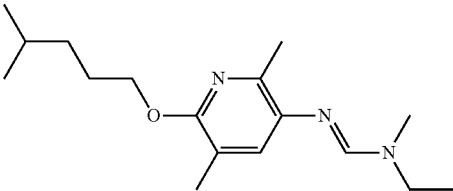
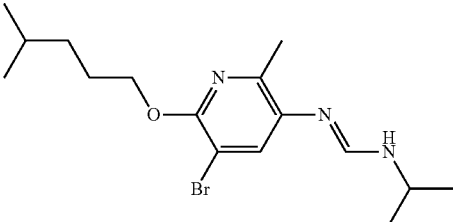
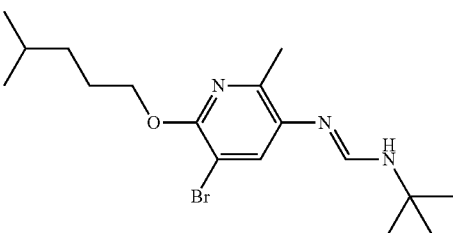
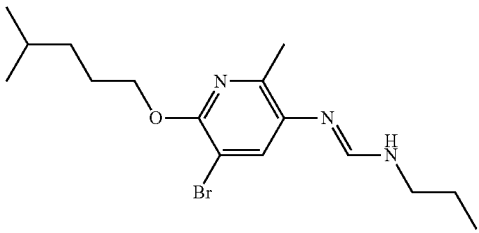
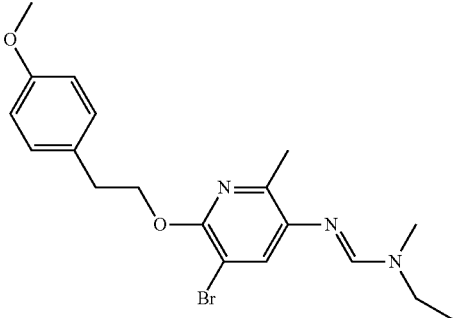
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.006		Gum
Q.007		Method 4: 1.32 min; 292
Q.008		Method 4: 1.39 min; 356
Q.009		Mp 72-73° C.
Q.010		Method 4: 1.42 min; 356
Q.011		Gum

TABLE Q-continued

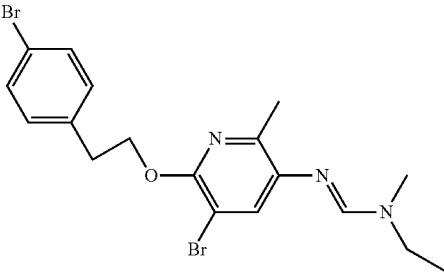
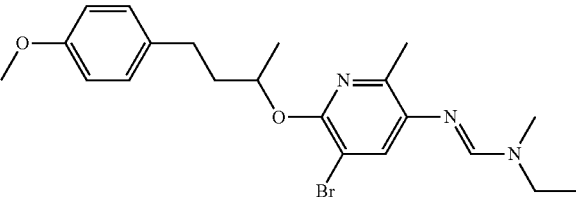
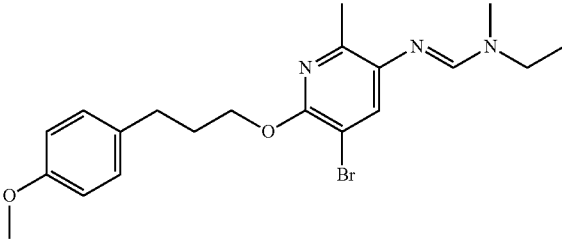
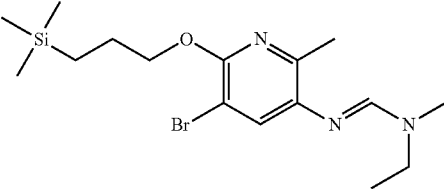
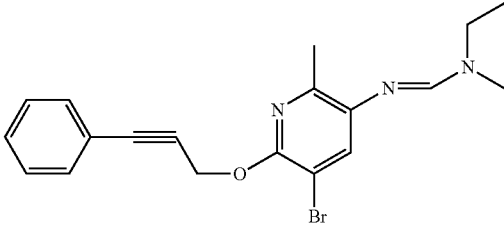
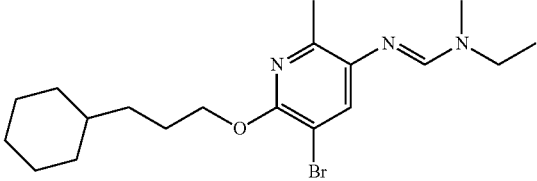
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.012		Gum
Q.013		Gum
Q.014		Gum
Q.015		Gum
Q.016		Gum
Q.017		Gum

TABLE Q-continued

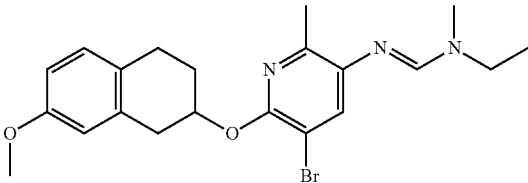
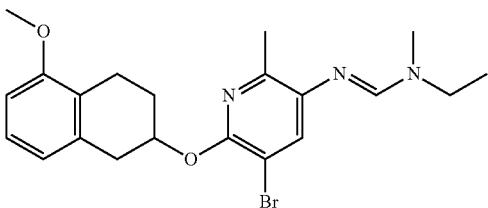
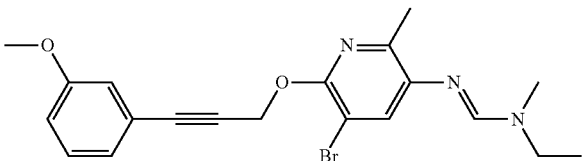
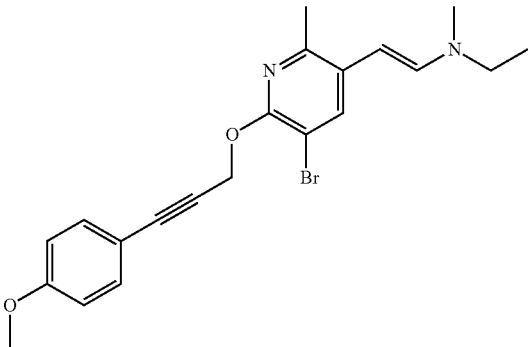
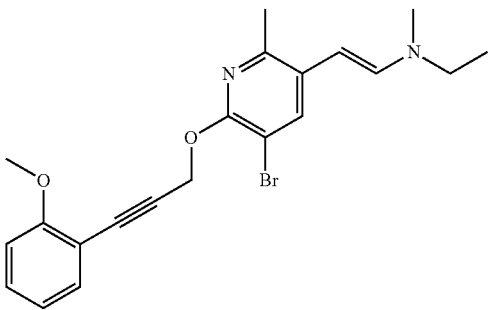
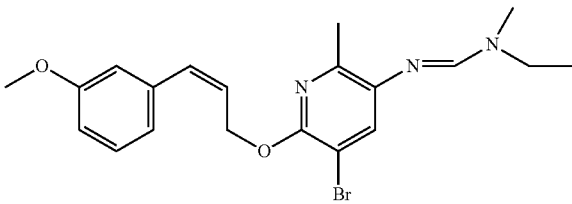
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.018		Gum
Q.019		Gum
Q.020		Gum
Q.021		Gum
Q.022		Gum
Q.023		Gum

TABLE Q-continued

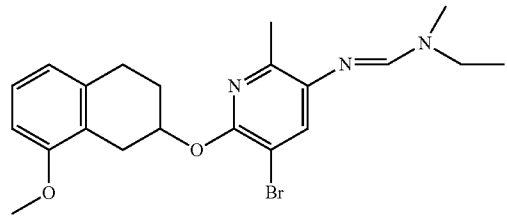
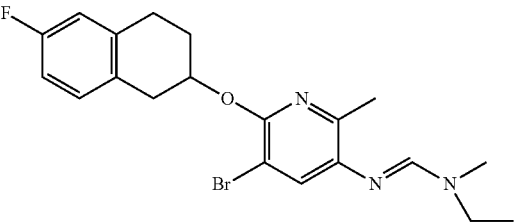
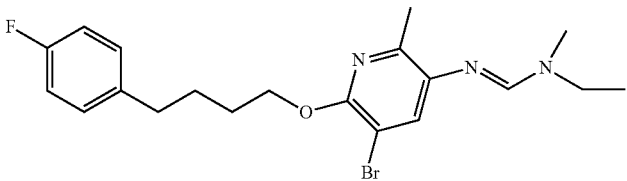
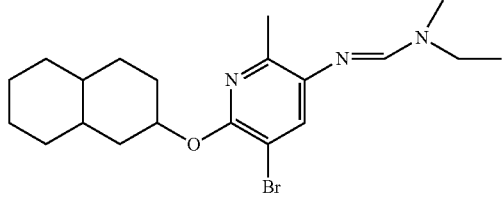
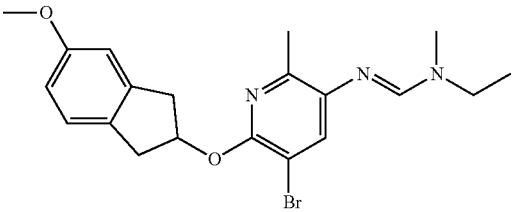
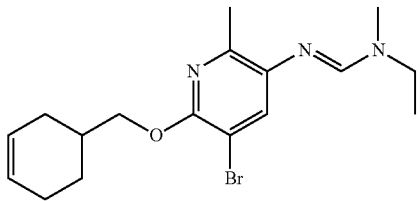
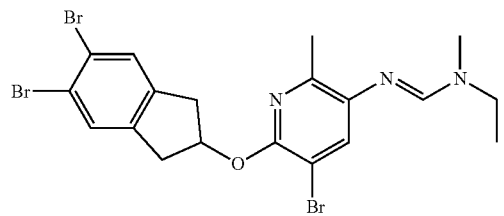
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.024		Gum
Q.025		Gum
Q.026		Gum
Q.027		Gum
Q.028		Method 4: 1.32 min; 418
Q.029		Liquid
Q.030		Method 4: 1.53 min; 544

TABLE Q-continued

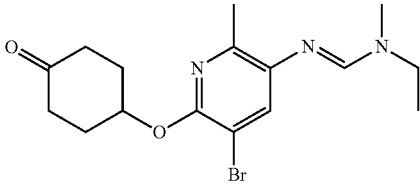
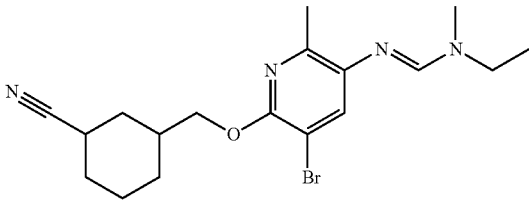
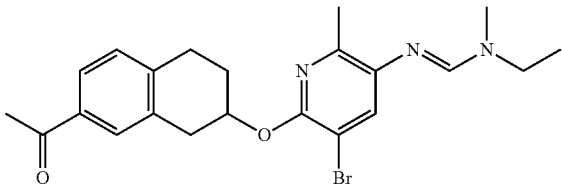
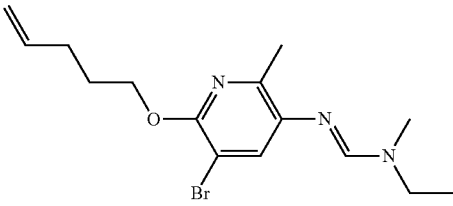
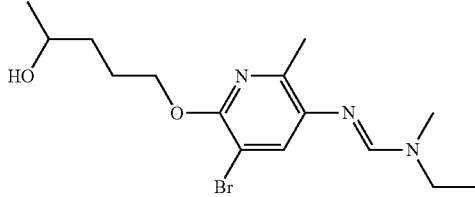
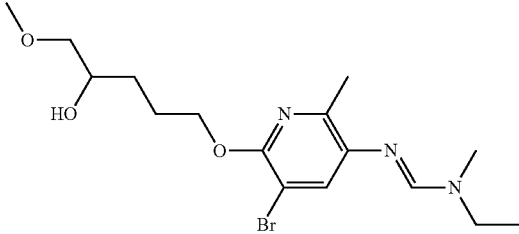
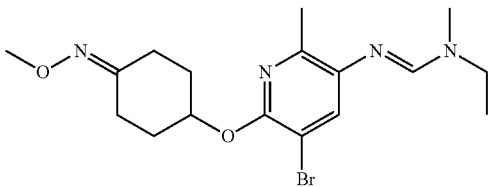
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.031		Gum
Q.032		Liquid
Q.033		Method 4: 1.31 min; 444
Q.034		Method 4: 1.22 min; 340
Q.035		Method 4: 0.99 min; 358
Q.036		Method 4: 0.98 min; 388
Q.037		Solid

TABLE Q-continued

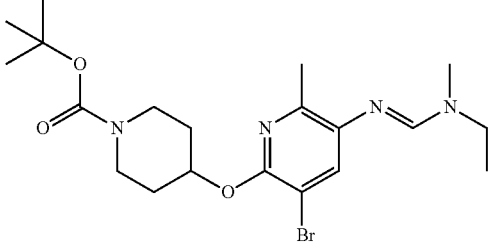
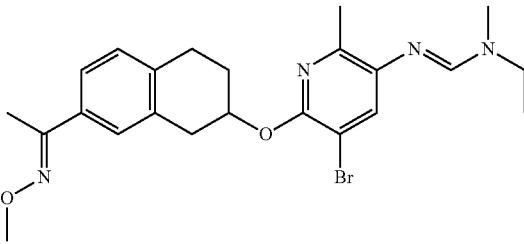
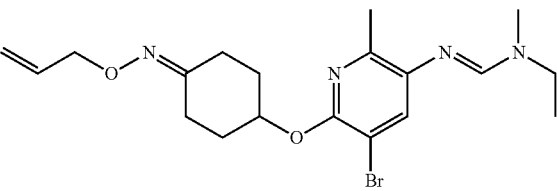
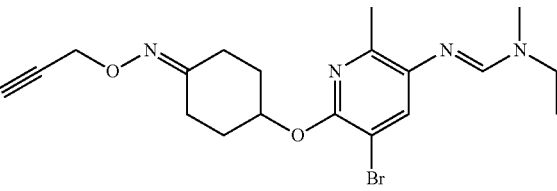
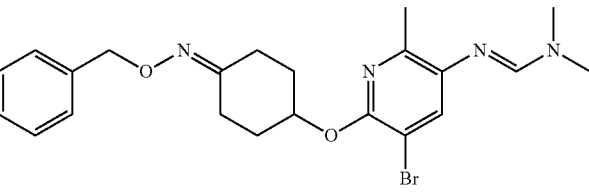
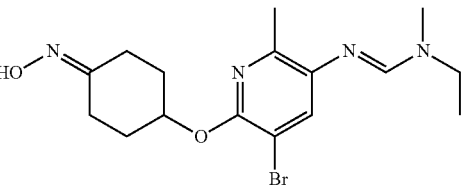
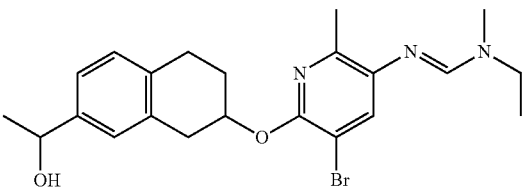
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.038		Liquid
Q.039		Method 4; 1.48 min; 473
Q.040		Liquid
Q.041		Liquid
Q.042		Liquid
Q.043		Liquid
Q.044		Method 4; 1.28 min; 446

TABLE Q-continued

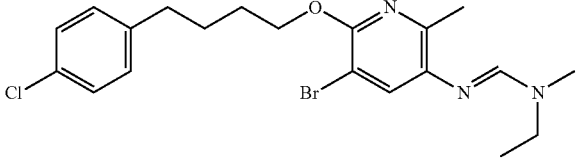
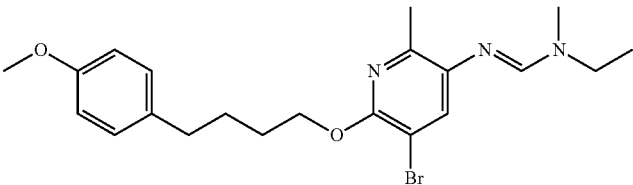
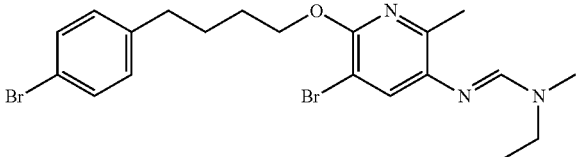
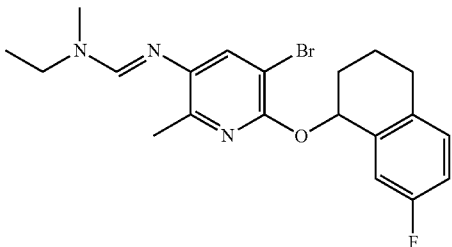
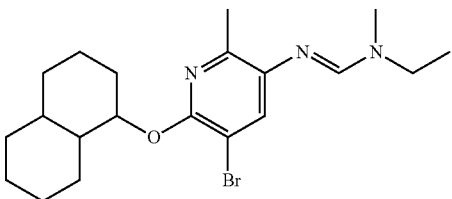
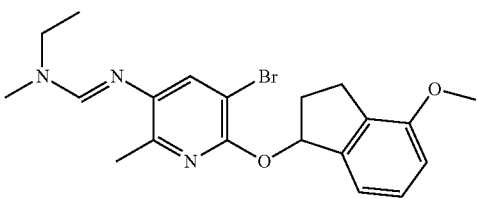
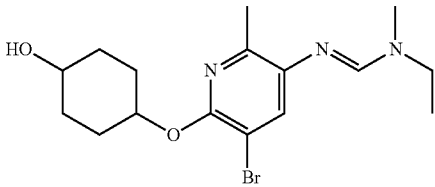
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.045		Gum
Q.046		Gum
Q.047		Gum
Q.048		Gum
Q.049		Gum
Q.050		Gum
Q.051		Liquid

TABLE Q-continued

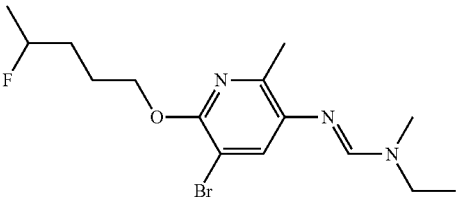
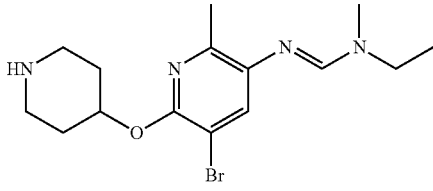
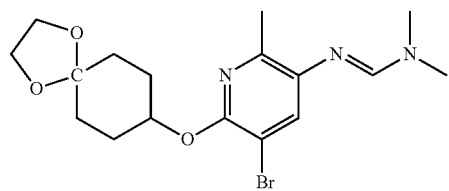
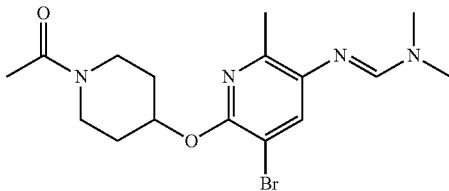
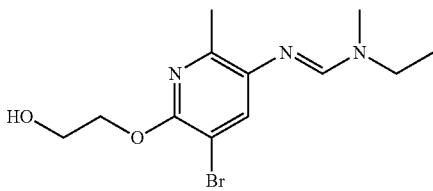
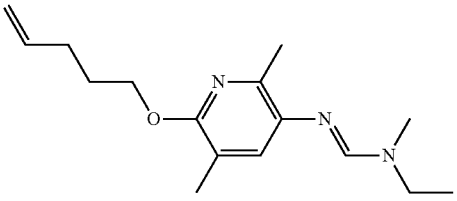
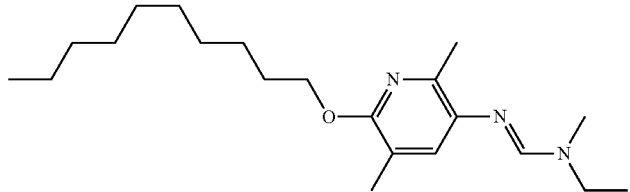
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.052		Method 4; 1.18 min; 360
Q.053		Liquid
Q.054		Liquid
Q.055		Liquid
Q.056		Solid
Q.057		Method 4; 1.19 min; 276
Q.058		Method 4; 1.64 min; 348

TABLE Q-continued

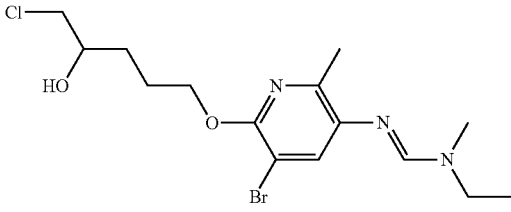
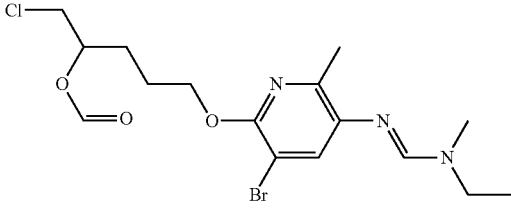
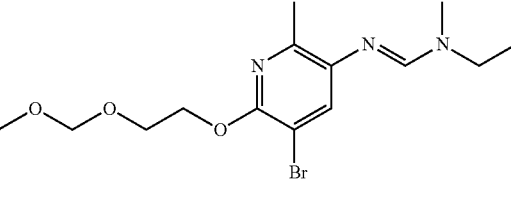
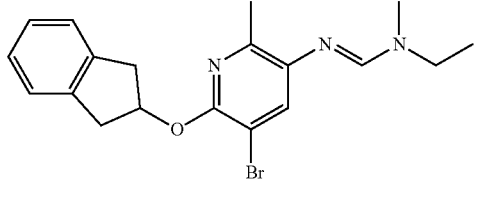
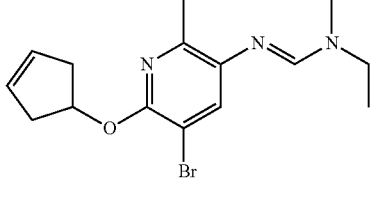
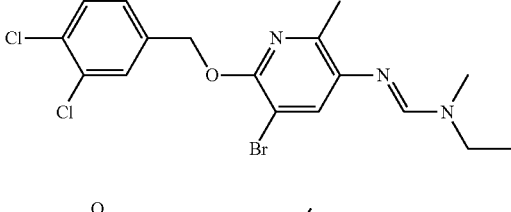
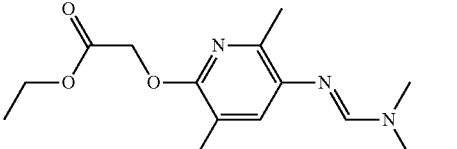
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.059		Method 4; 1.00 min; 392
Q.060		Method 4; 1.16 min; 420
Q.061		Liquid
Q.062		Method 4; 1.34 min; 388
Q.063		Method 4; 1.16 min; 338
Q.064		Mp 77-78° C.
Q.065		Liquid

TABLE Q-continued

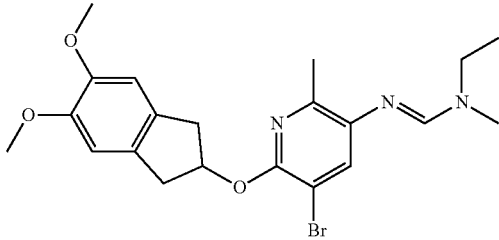
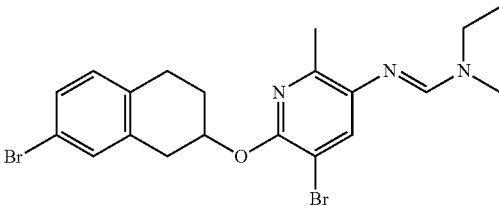
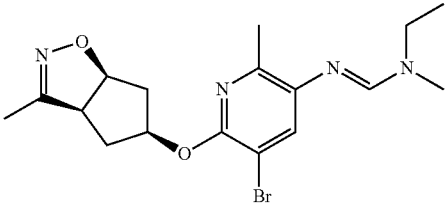
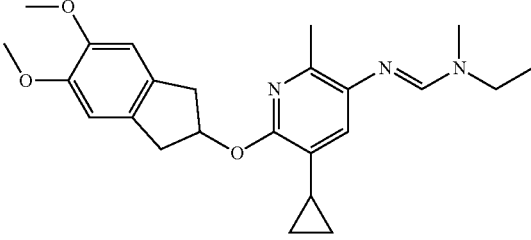
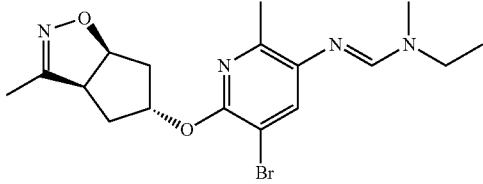
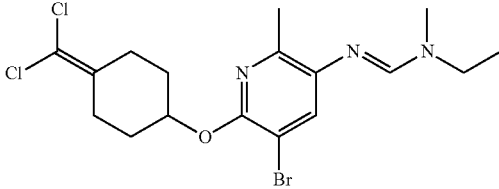
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.066		Liquid
Q.067		Liquid
Q.068		Solid
Q.069		Method 4: 1.30 min; 410
Q.070		Liquid
Q.071		Gum

TABLE Q-continued

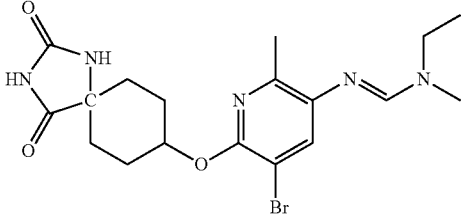
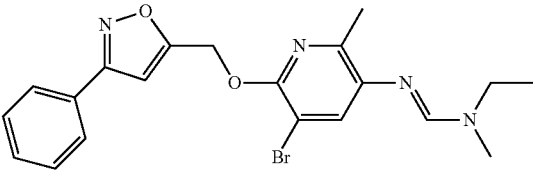
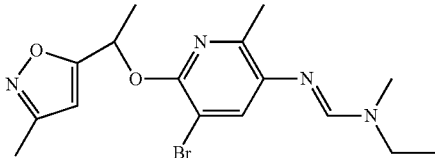
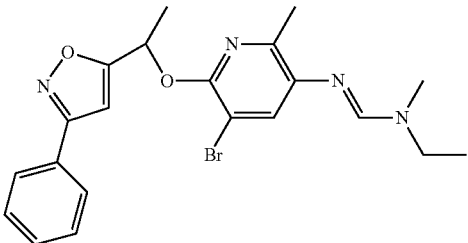
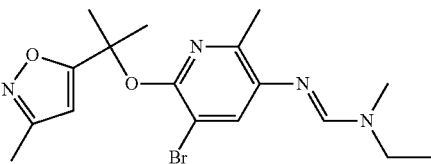
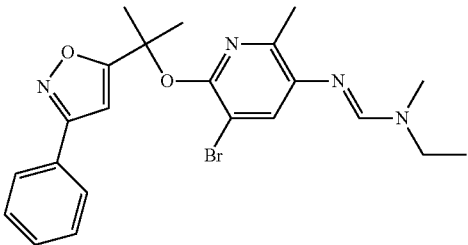
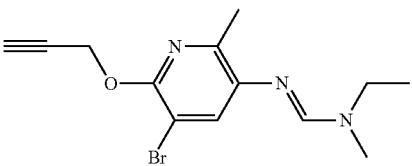
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.072		Solid
Q.073		Solid
Q.074		Liquid
Q.075		Liquid
Q.076		Liquid
Q.077		Liquid
Q.078		Liquid

TABLE Q-continued

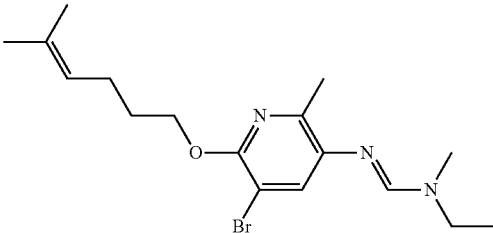
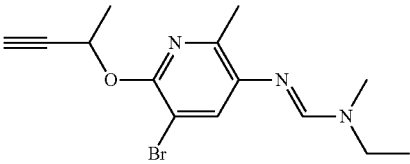
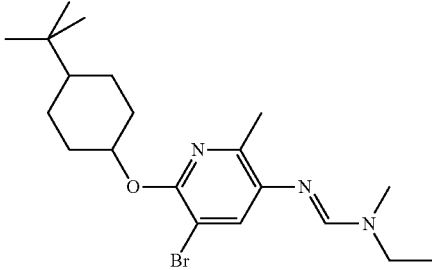
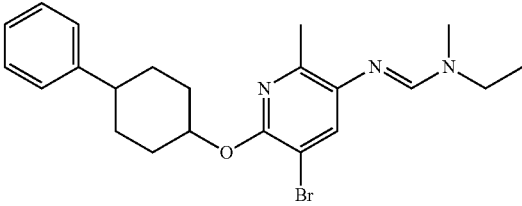
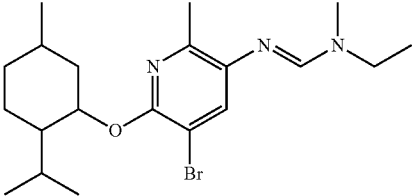
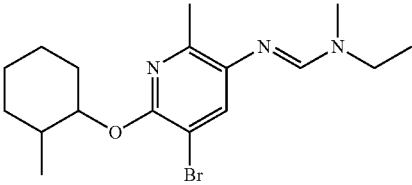
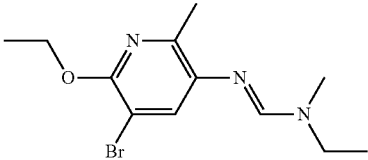
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.079		Method 4; 1.39 min; 368
Q.080		Liquid
Q.081		Liquid
Q.082		Liquid
Q.083		Liquid
Q.84		Liquid
Q.085		Gum

TABLE Q-continued

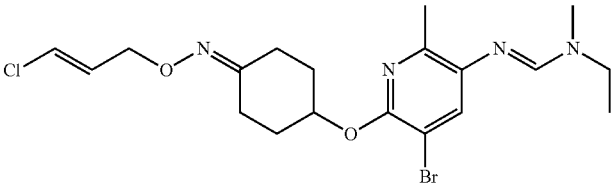
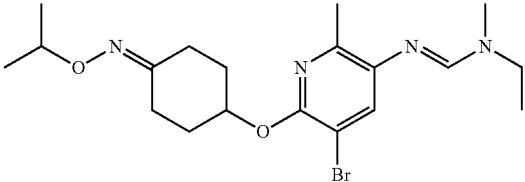
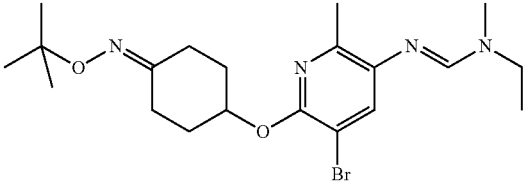
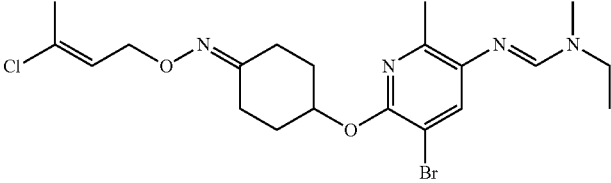
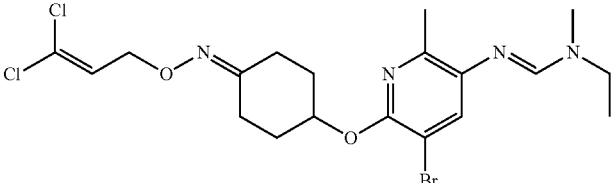
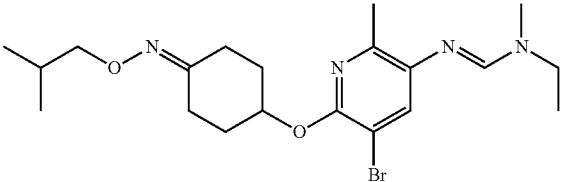
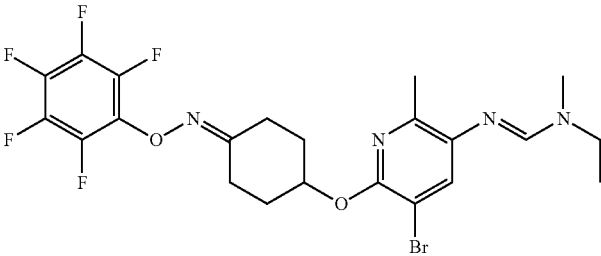
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.086		Liquid
Q.087		Liquid
Q.088		Liquid
Q.089		Liquid
Q.090		Liquid
Q.091		Liquid
Q.092		Liquid

TABLE Q-continued

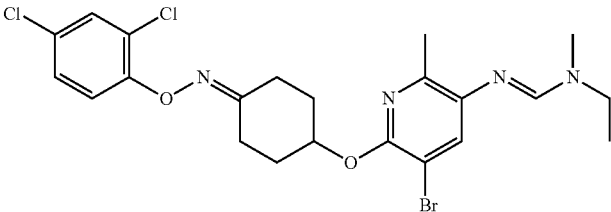
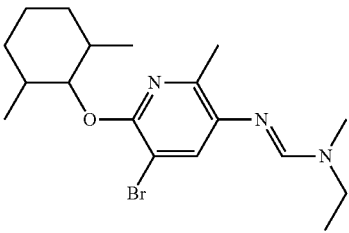
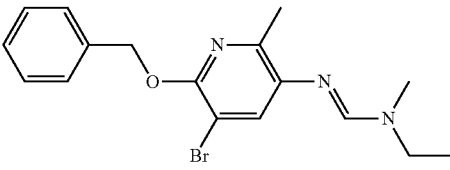
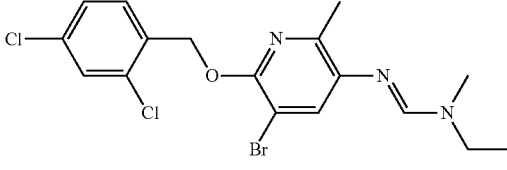
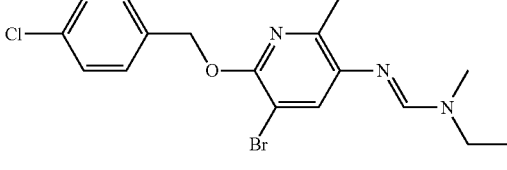
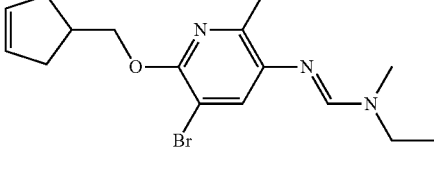
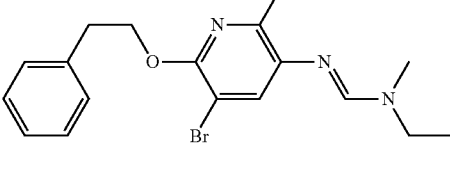
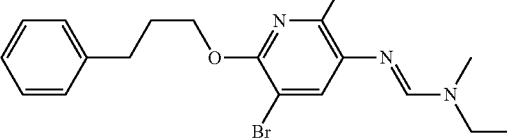
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.093		Gum
Q.094		Liquid
Q.095		Method 1: 13.577 min; 362
Q.096		Mp 81-82° C.
Q.097		Method 2: 11.956 min; 398
Q.098		Method 1: 11.773 min; 352
Q.099		Method 1: 11.755 min; 376
Q.100		Method 1: 12.320 min; 390

TABLE Q-continued

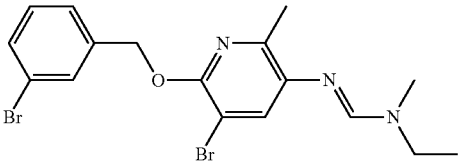
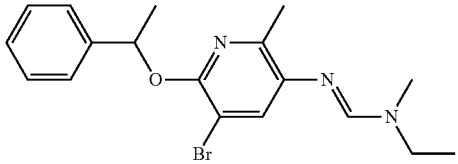
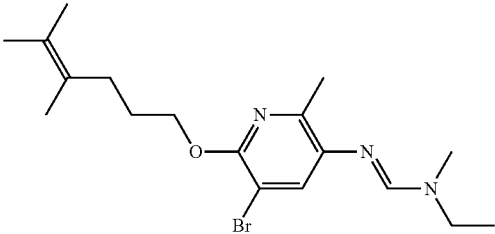
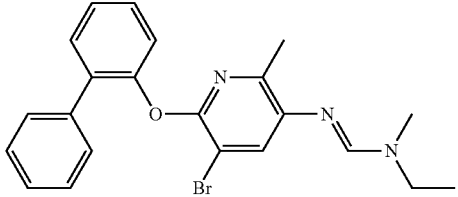
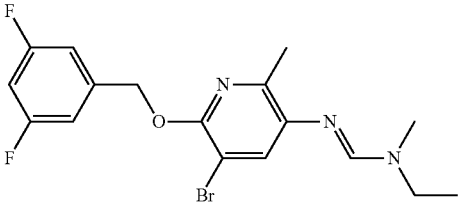
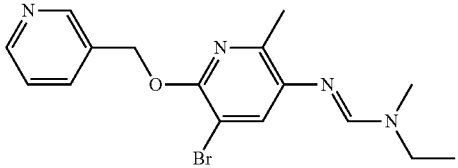
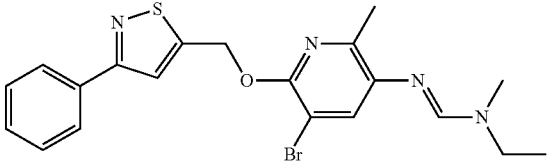
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.101		Method 1: 12.207 min; 440
Q.102		Method 1: 11.873 min; 376
Q.103		Method 1: 13.153 min; 382
Q.104		Method 1: 6.418 min; 438
Q.105		Method 1: 11.571 min; 400
Q.106		Method 1: 12.115 min; 365
Q.107		Mp 107-108° C.

TABLE Q-continued

		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.108		Method 2: 12.713 min; 523
Q.109		Method 1: 12.881 min; 479
Q.110		Method 2: 12.214 min; 402
Q.111		Mp 57-59° C.
Q.112		Method 2: 12.236 min; 390
Q.113		Method 1: 12.030 min; 412
Q.114		Method 2: 13.002 min; 404

TABLE Q-continued

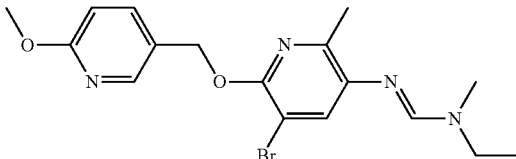
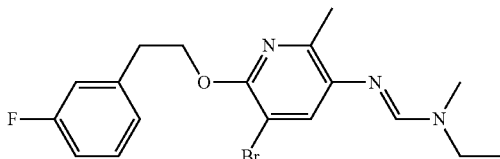
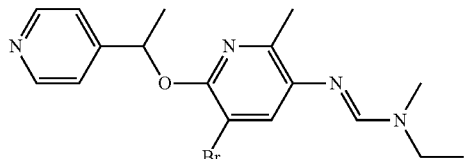
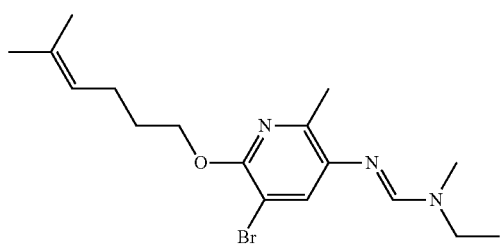
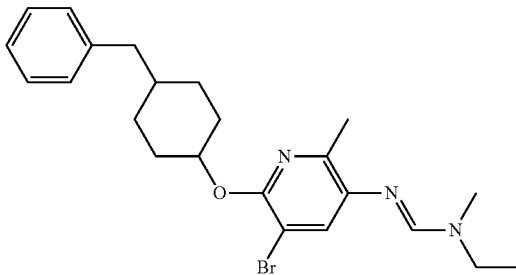
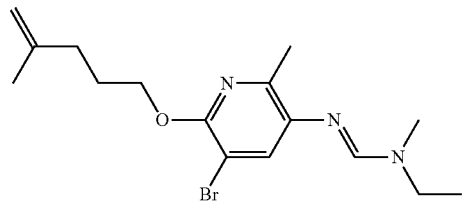
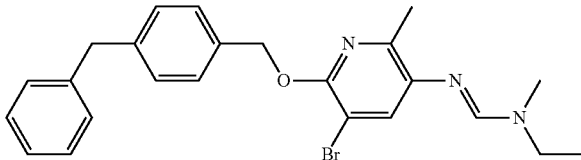
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.115		Method 1: 9.589 min; 393
Q.116		Method 2: 11.625 min; 394
Q.117		Method 2: 6.956 min; 377
Q.118		Method 2: 12.577 min; 368
Q.119		Method 1: 13.850 min; 444
Q.120		Method 2: 11.861 min; 354
Q.121		Method 2: 12.977 min; 451

TABLE Q-continued

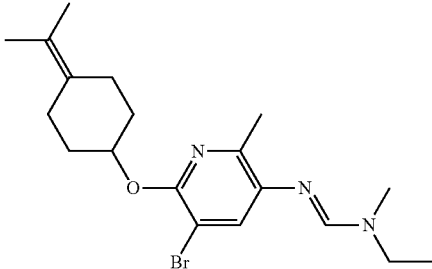
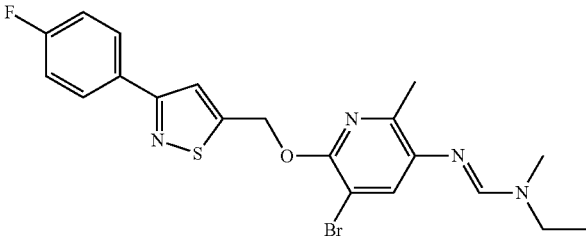
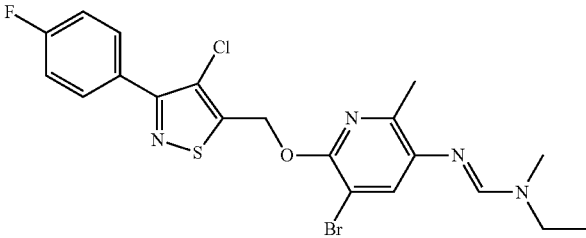
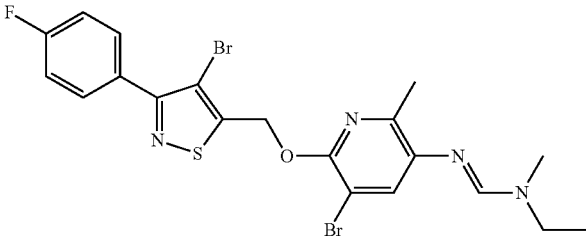
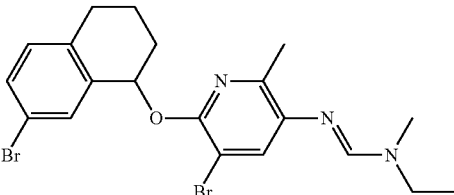
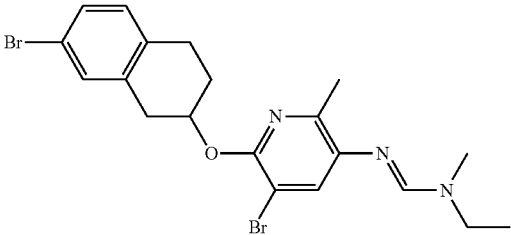
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.122		Method 2 13.353 min; 394
Q.123		Mp 120-121° C.
Q.124		Mp 98-99° C.
Q.125		Mp 101-102° C.
Q.126		Method 1: 13.029 min; 480
Q.127		Method 2: 13.168 min; 481

TABLE Q-continued

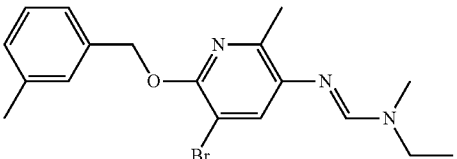
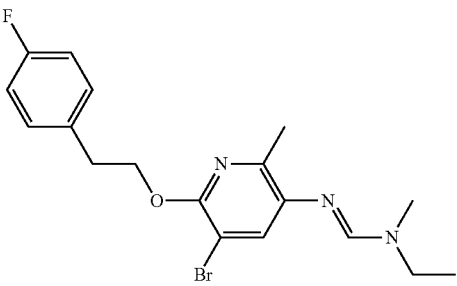
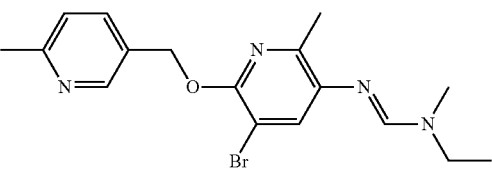
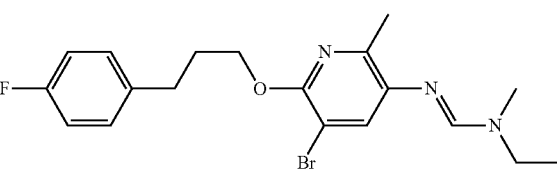
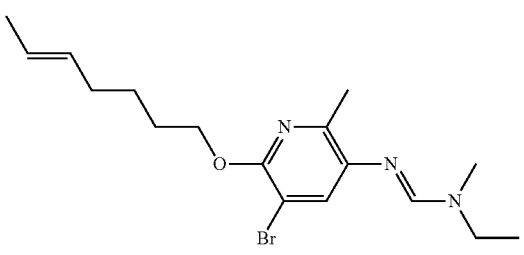
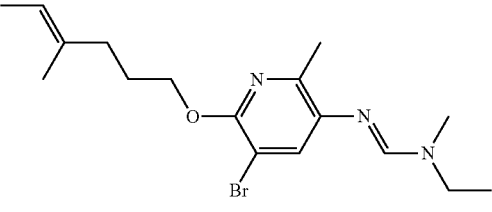
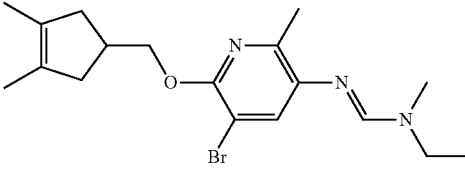
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.128		Mp 60-62° C.
Q.129		Mp 46-48° C.
Q.130		Method 2: 3.41 min; 377
Q.131		Method 2: 12.242 min; 408
Q.132		Method 1: 12.688 min; 368
Q.133		Method 1: 12.522 min; 368
Q.134		Method 2: 12.979 min; 380

TABLE Q-continued

		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.135		Method 3: 1.49 min; 396: Cis
Q.136		Method 1: 10.914 min; 431
Q.137		Mp 43-45° C.
Q.138		Method 1: 13.065 min; 402
Q.139		Method 1: 13.387 min; 370
Q.140		Method 2: 12.176 min; 366

TABLE Q-continued

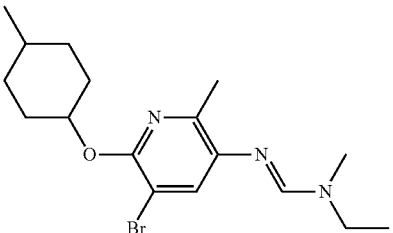
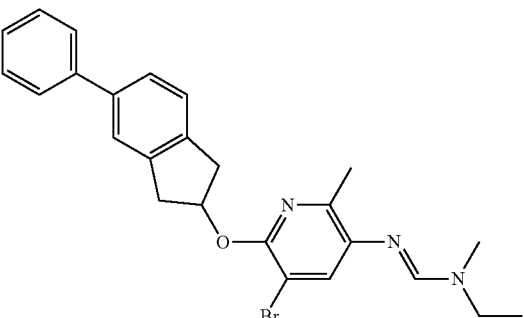
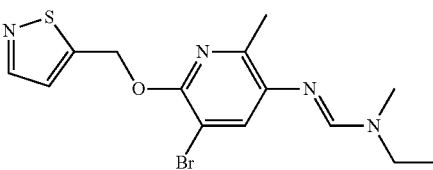
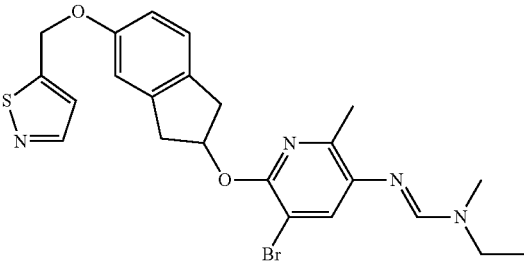
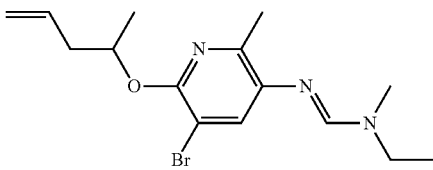
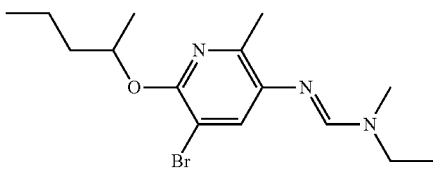
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.141		Method 1: 12.712 min; 368
Q.142		Method 1: 13.557 min; 466
Q.143		Mp 71-73° C.
Q.144		Method 1: 11.879 min; 503
Q.145		Mp 106-107° C.
Q.146		Method 1: 11.862 min; 344

TABLE Q-continued

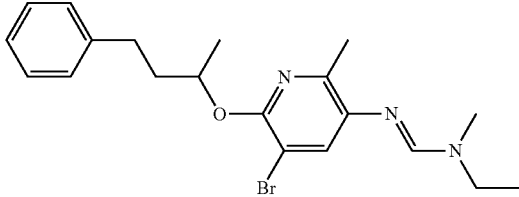
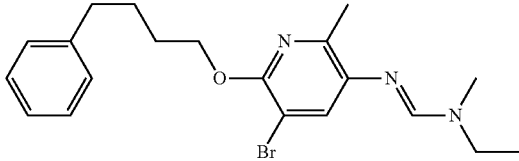
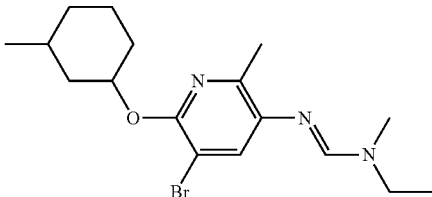
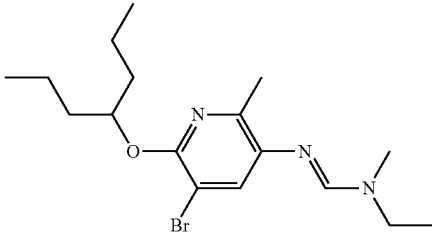
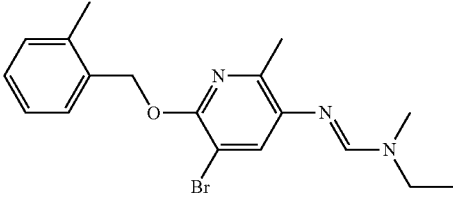
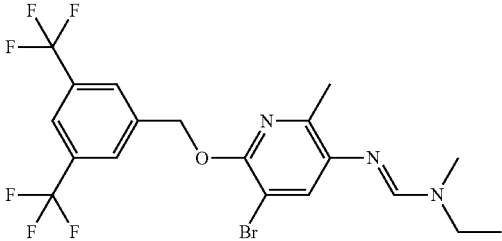
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.147		Method 1: 12.605 min; 404
Q.148		Method 1: 12.704 min; 405
Q.149		Method 1: 12.642 min; 370
Q.150		Method 1: 13.317 min; 372
Q.151		Liquid
Q.152		Mp 100-101° C.

TABLE Q-continued

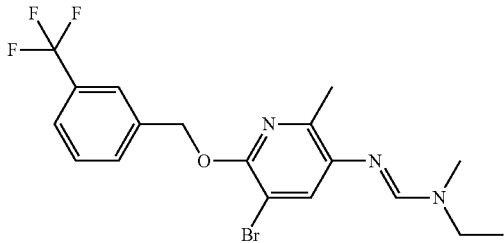
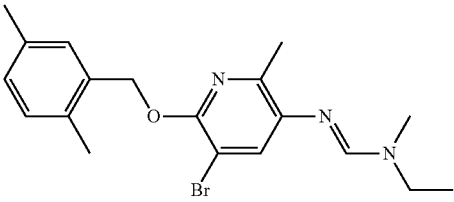
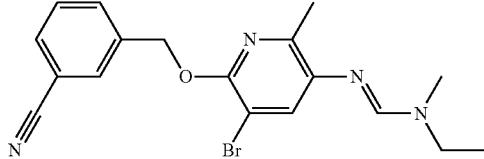
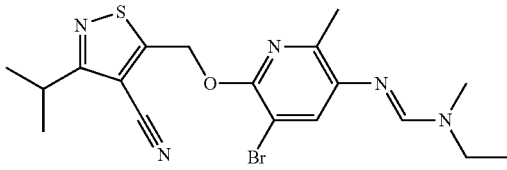
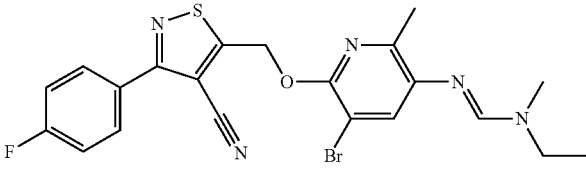
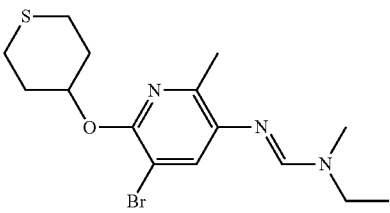
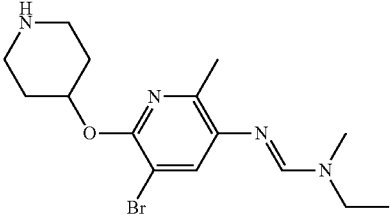
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.153		Mp 43-44° C.
Q.154		Mp 53-57° C.
Q.155		Mp 75-78° C.
Q.156		Mp 90-91° C.
Q.157		Mp 125-127° C.
Q.158		Liquid
Q.159		Liquid

TABLE Q-continued

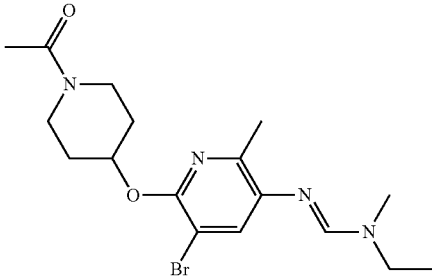
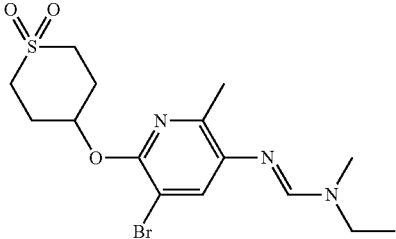
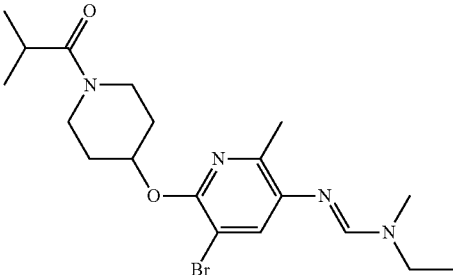
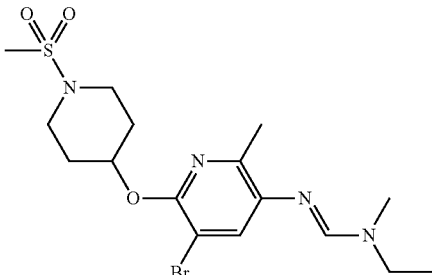
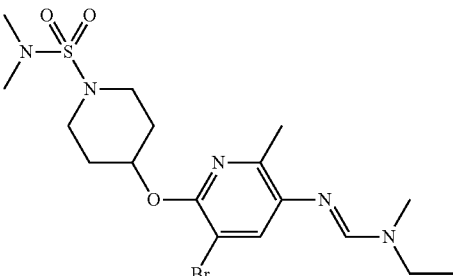
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.160		Liquid
Q.161		Liquid
Q.162		Liquid
Q.163		Mp 90-95° C.
Q.164		Mp 88-90° C.

TABLE Q-continued

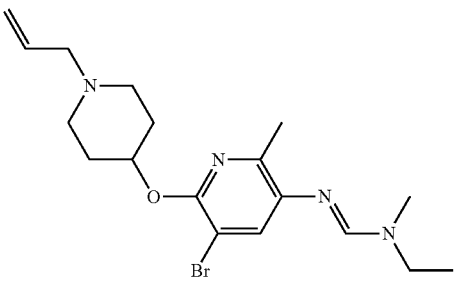
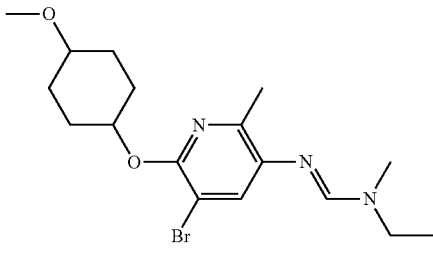
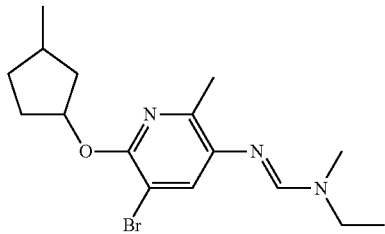
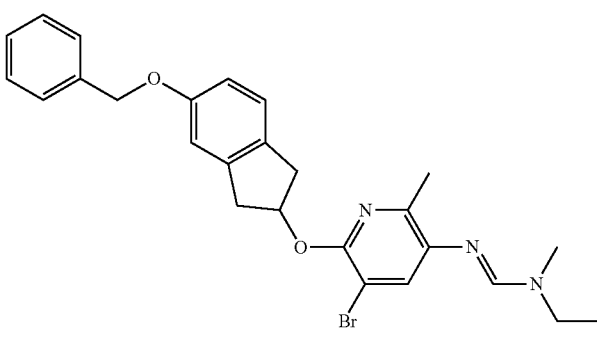
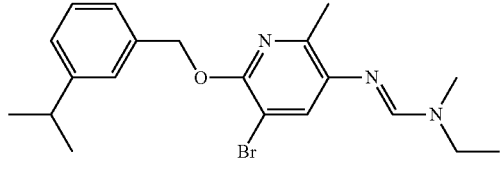
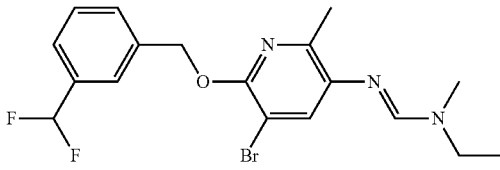
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.165		Liquid
Q.166		Liquid
Q.167		Liquid
Q.168		Liquid
Q.169		Liquid
Q.170		Liquid

TABLE Q-continued

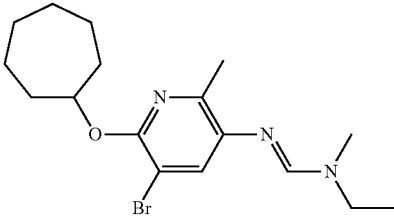
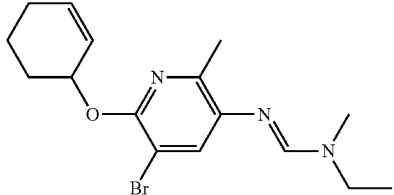
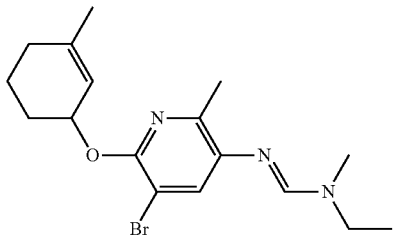
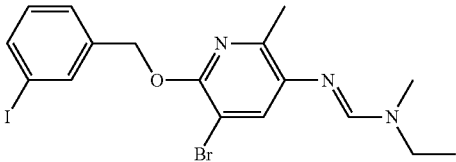
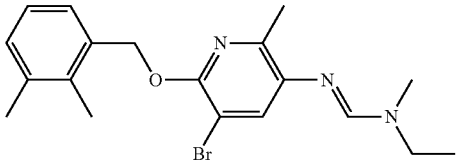
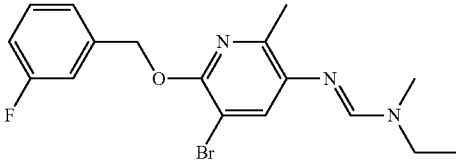
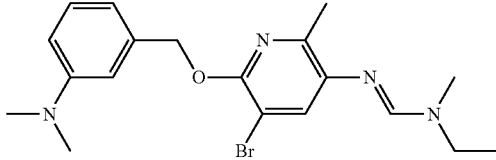
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.171		Liquid
Q.172		Mp 72-76° C.
Q.173		Liquid
Q.174		Liquid
Q.175		Liquid
Q.176		Liquid
Q.177		Liquid

TABLE Q-continued

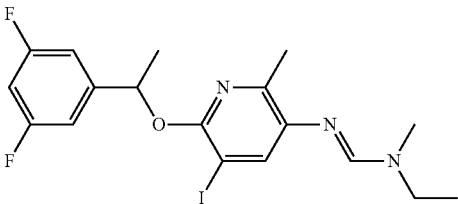
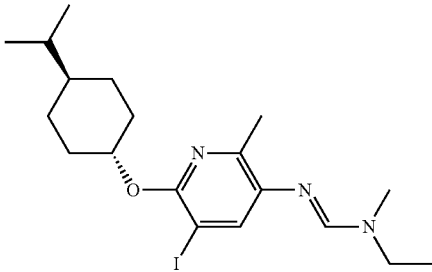
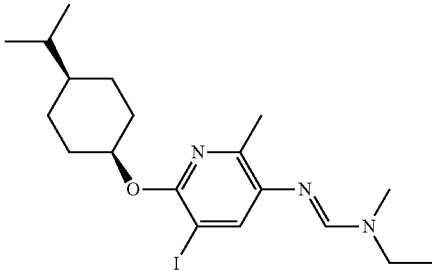
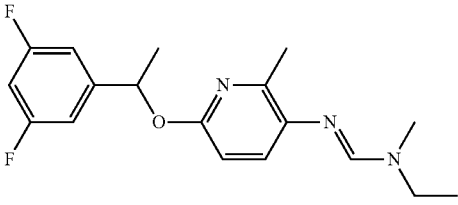
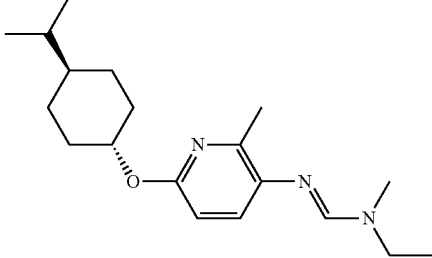
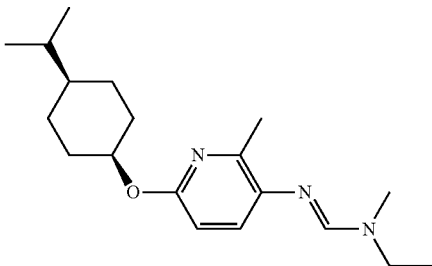
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.178		Method 2: 12.011 min; 460
Q.179		Method 1: 13.777 min; 444; Trans
Q.180		Method 1: 13.653 min; 444; Cis
Q.181		Method 2: 11.260 min; 334
Q.182		Method 1: 13.163 min; 318; Trans
Q.183		Method 1: 14.926 min; 318; Cis

TABLE Q-continued

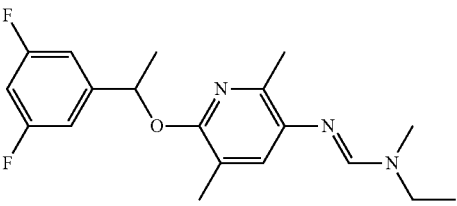
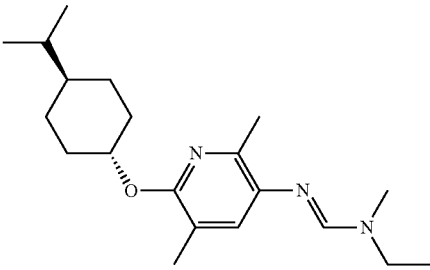
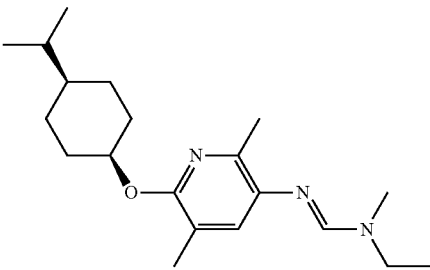
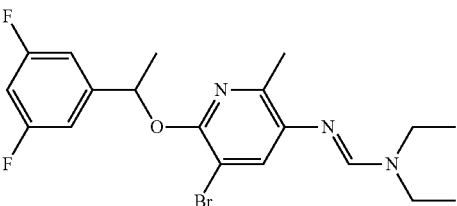
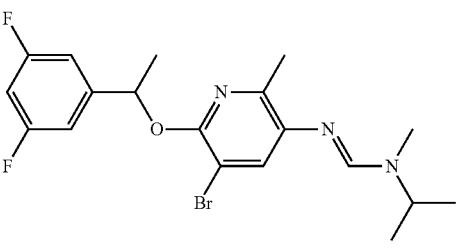
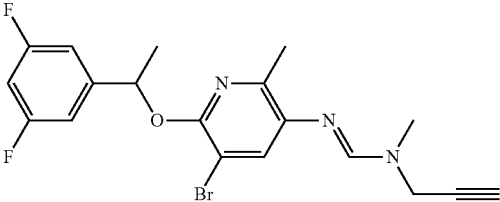
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.184		Method 2: 12.116 min; 348
Q.185		Method 1: 14.254 min; 332; Trans
Q.186		Method 1: 15.845 min; 332; Cis
Q.187		Method 2: 12.707 min; 426
Q.188		Method 2: 12.145 min; 426
Q.189		Method 2: 11.943 min; 422

TABLE Q-continued

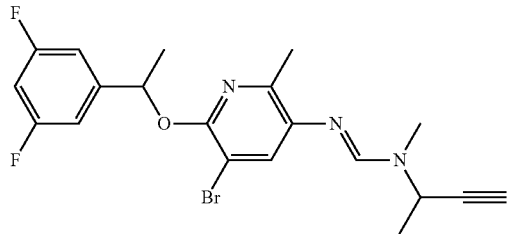
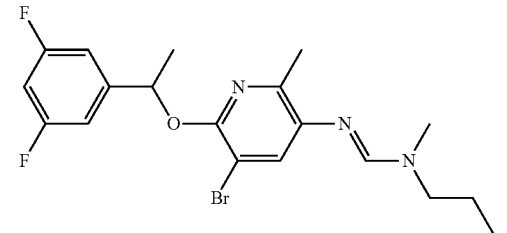
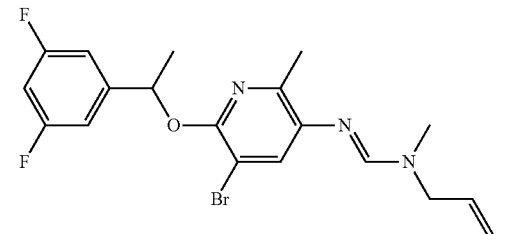
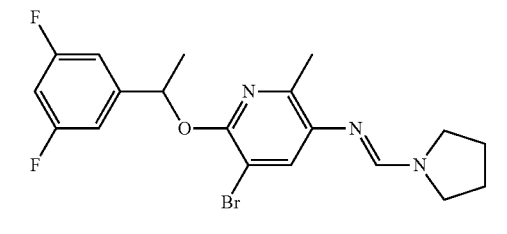
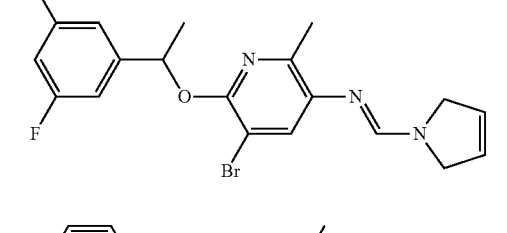
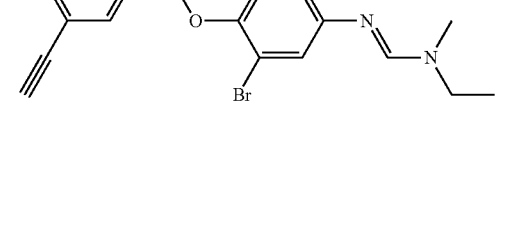
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.190		Method 1: 12.216 min; 436
Q.191		Method 2: 12.769 min; 426
Q.192		Method 2: 12.121 min; 424
Q.193		Method 2: 11.891 min; 424
Q.194		Method 2: 11.881 min; 422
Q.195		Mp 52-54° C.

TABLE Q-continued

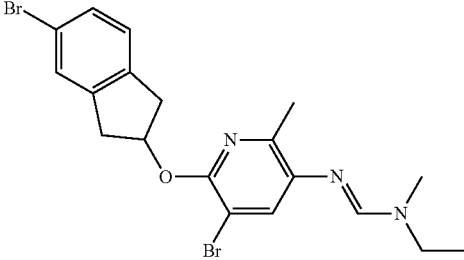
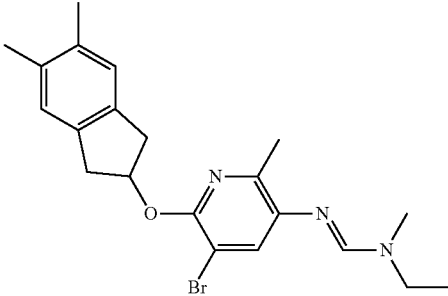
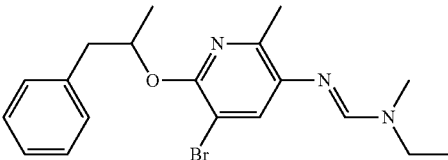
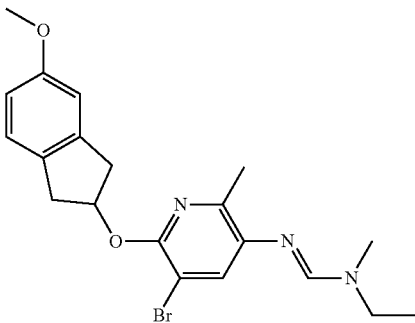
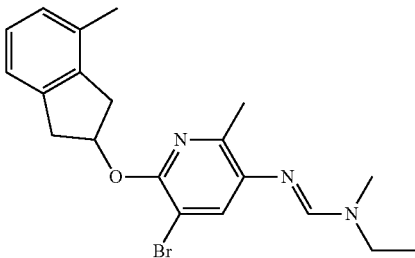
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.196		Method 1: 12.439 min; 466
Q.197		Method 1: 11.886 min; 416
Q.198		Method 1: 11.886 min; 390
Q.199		Method 1: 11.955 min; 418
Q.200		Method 1: 12.096 min; 402

TABLE Q-continued

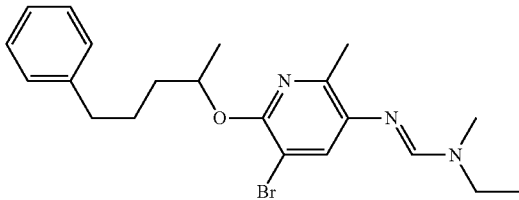
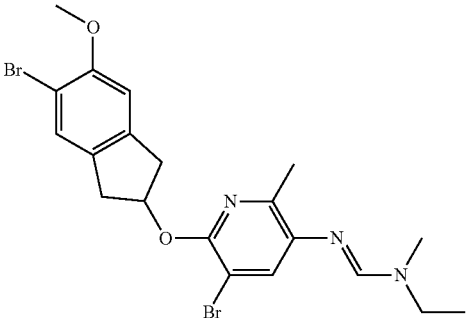
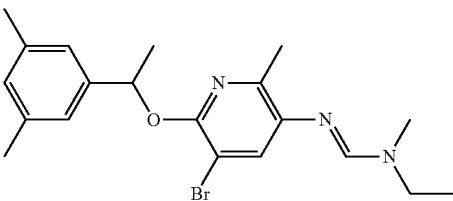
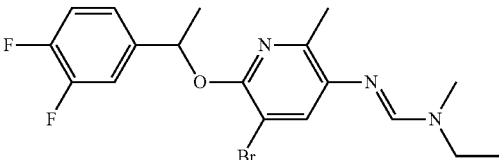
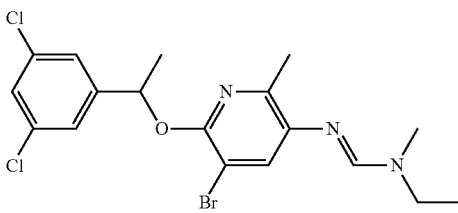
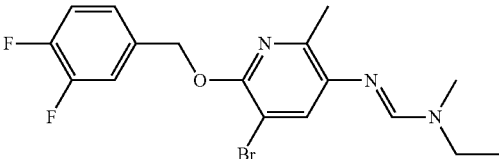
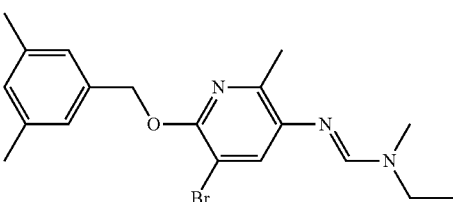
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.201		Method 1: 12.796 min; 418
Q.202		Method 1: 12.154 min; 496
Q.203		Method 2: 13.148 min; 404
Q.204		Method 2: 11.780 min; 412
Q.205		Method 1: 6.785 min; 444
Q.206		Mp 75-78° C.
Q.207		Mp 57-58° C.

TABLE Q-continued

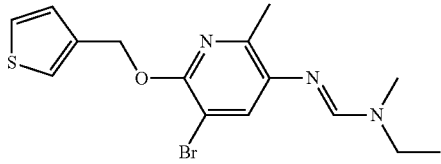
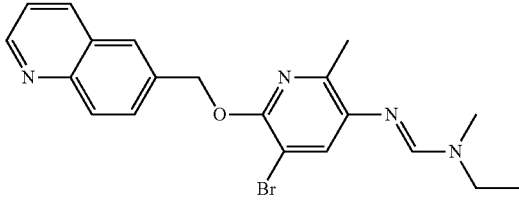
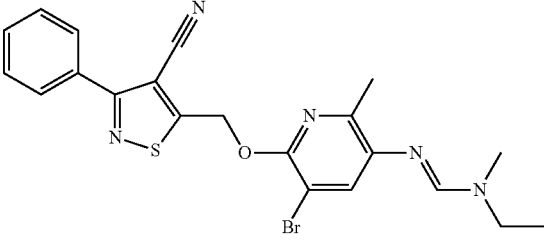
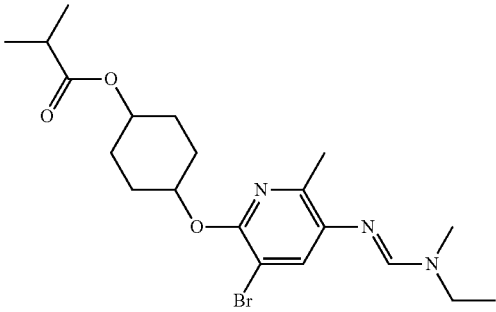
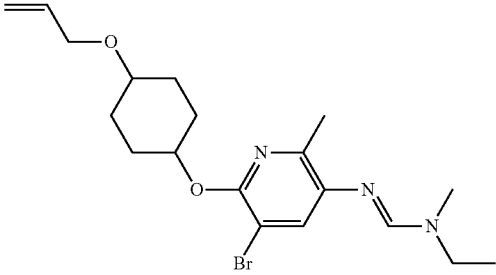
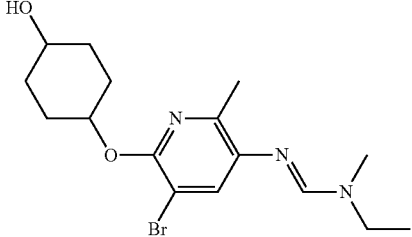
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.208		Method 1: 10.753 min; 368
Q.209		Method 1: 7.472 min; 413
Q.210		Mp 134-135° C.
Q.211		Method 1: 11.913 min; 440
Q.212		Method 1: 11.392 min; 410
Q.213		Method 1: 8.301 min; 370

TABLE Q-continued

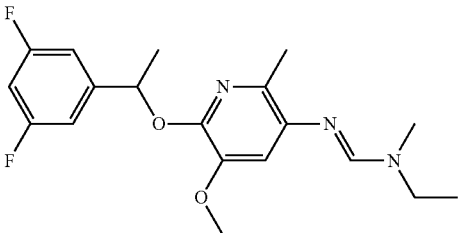
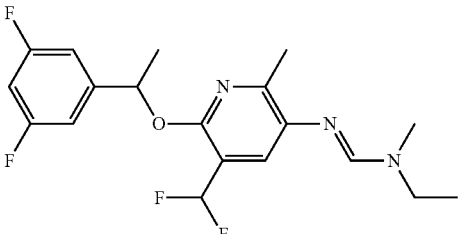
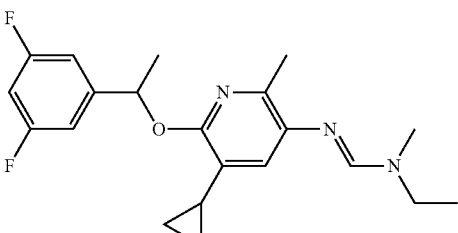
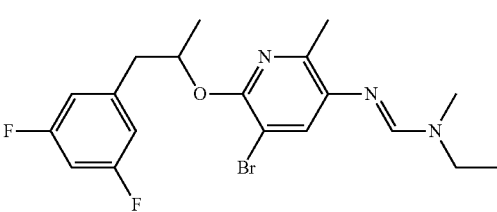
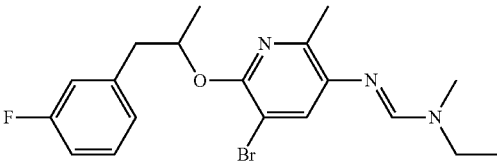
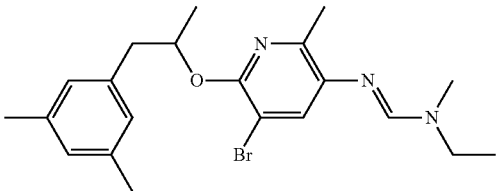
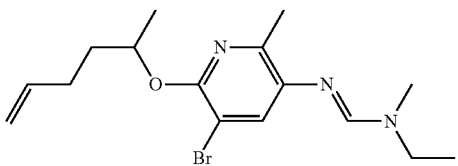
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.214		Method 1: 11.318 min; 364
Q.215		Method 1: 12.017 min; 384
Q.216		Method 2: 12.660 min; 374
Q.217		Method 1: 12.015 min; 426
Q.218		Method 2: 12.403 min; 408
Q.219		Method 2: 13.469 min; 418
Q.220		Method 1: 11.837 min; 354

TABLE Q-continued

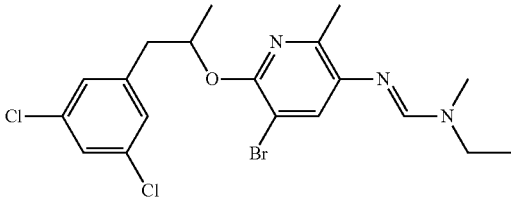
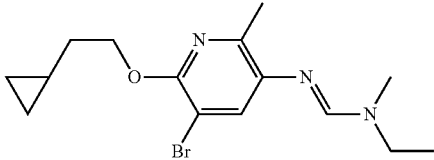
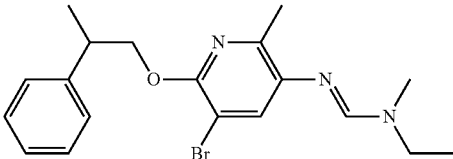
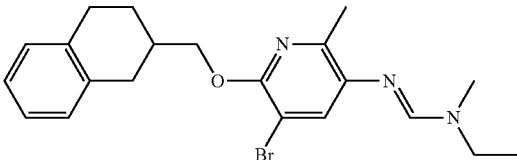
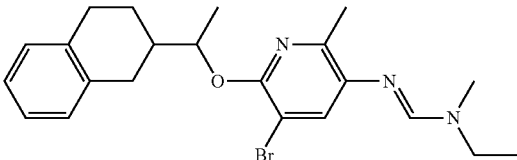
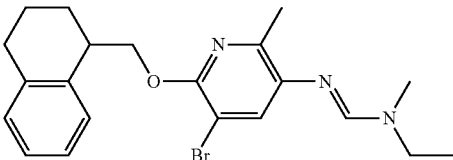
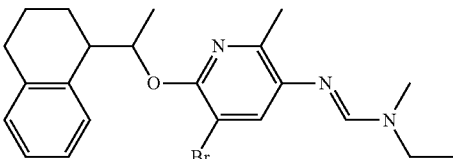
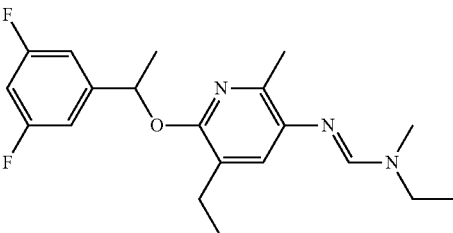
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.221		Method 1: 13.221 min; 458
Q.222		Method 2: 11.427 min; 340
Q.223		Method 1: 12.006 min; 390
Q.224		Method 2: 12.567 min; 416
Q.225		Method 2: 13.408 min; 430
Q.226		Method 1: 12.686 min; 416
Q.227		Method 2: 13.431 min; 430
Q.228		Method 2: 12.346 min; 362

TABLE Q-continued

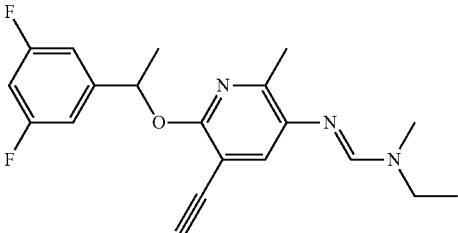
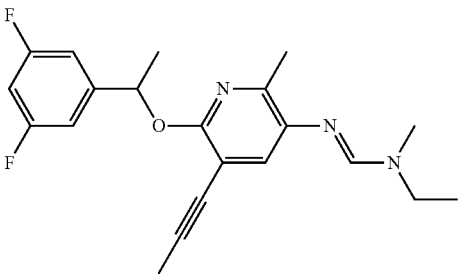
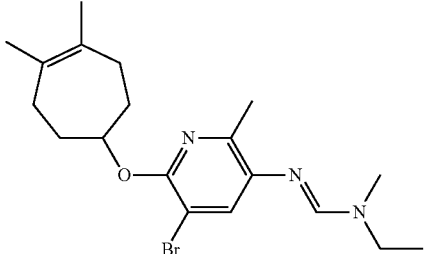
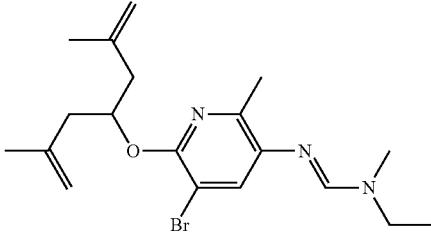
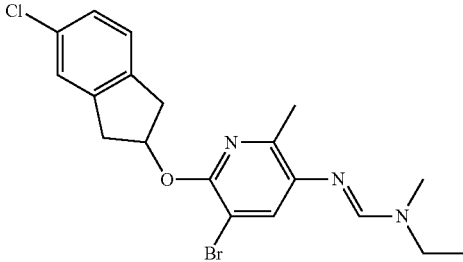
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.229		Method 2: 11.570 min; 358
Q.230		Method 1: 12.261 min; 372
Q.231		Method 1: 13.535 min; 394
Q.232		Method 1: 13.295 min; 394
Q.233		Method 2: 11.937 min; 422

TABLE Q-continued

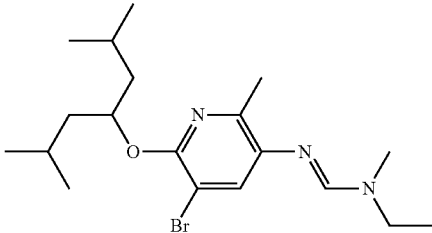
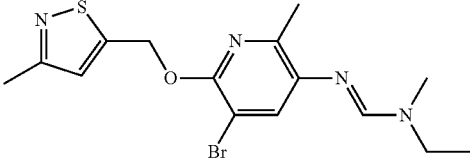
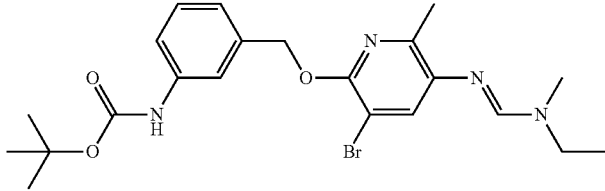
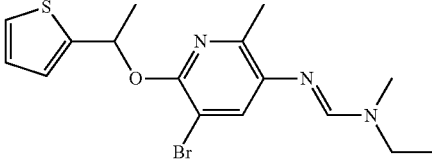
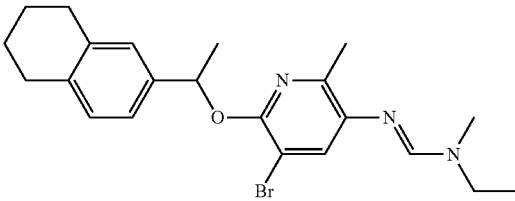
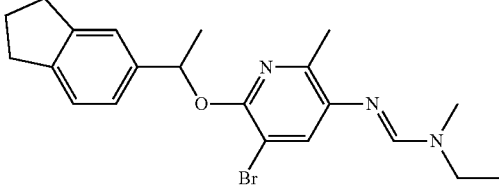
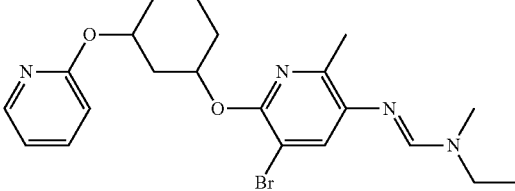
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.234		Method 1: 14.173 min; 398
Q.235		Mp 55-57° C.
Q.236		Mp 40-42° C.
Q.237		Method 1: 8.524 min; 382
Q.238		Method 1: 19.177 min; 430
Q.239		Method 1: 18.583 min; 416
Q.240		Method 1: 10.070 min; 447

TABLE Q-continued

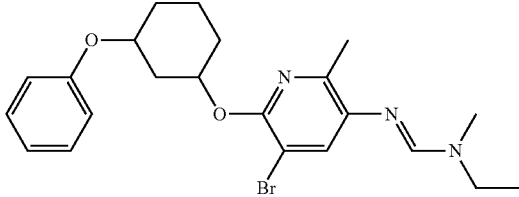
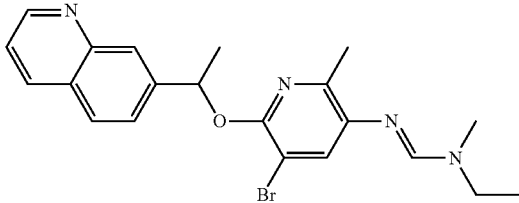
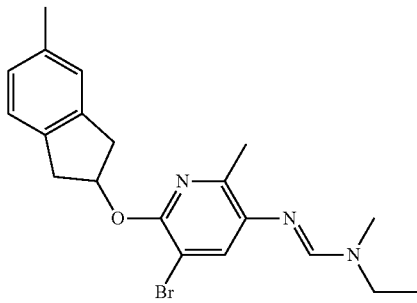
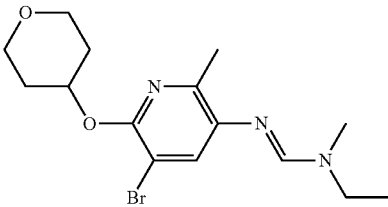
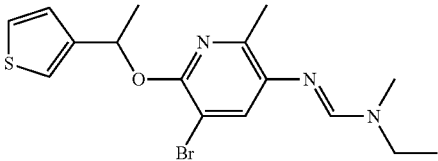
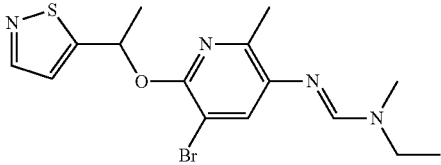
		LC-Method: R_t (min); MS-ESI (m/z; (M + H) ⁺)
Q.241		Method 1: 12.850 min; 446
Q.242		Method 1: 8.079 min; 427
Q.243		Method 1: 12.200 min; 402
Q.244		Method 1: 9.090 min; 356
Q.245		Method 1: 8.672 min; 382
Q.246		Method 1: 11.718 min; 383

TABLE Q-continued

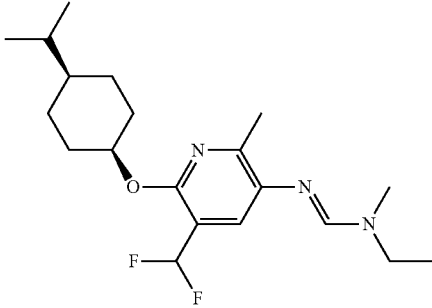
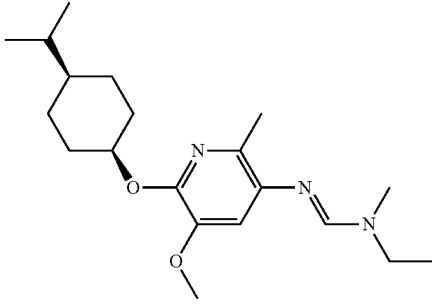
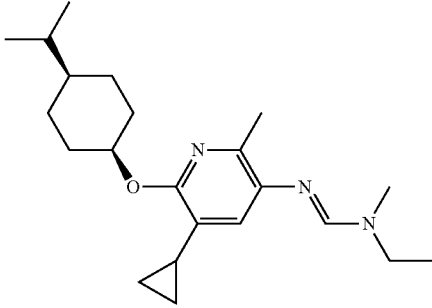
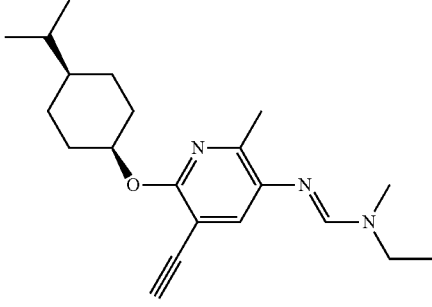
Q.247		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
		Method 1: 13.430 min; 368; Cis
Q.248		Method 1: 13.051 min; 348; Cis
Q.249		Method 1: 14.416 min; 358; Cis
Q.250		Method 1: 13.413 min; 342; Cis

TABLE Q-continued

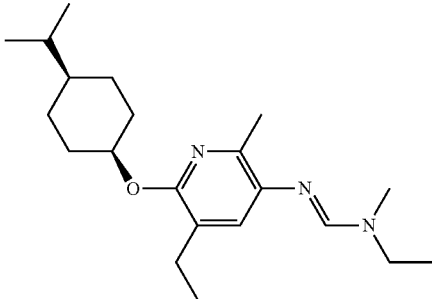
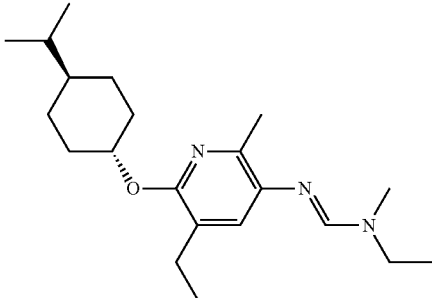
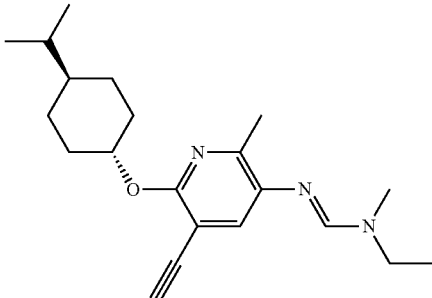
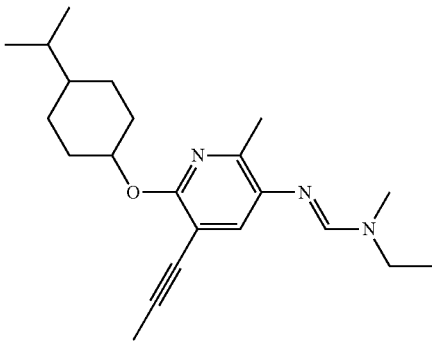
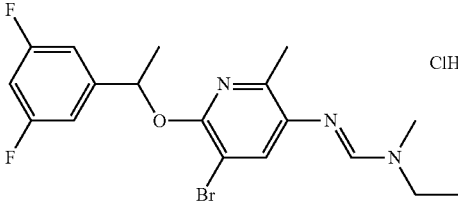
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.251		Method 1; 14.420 min; 346; Cis
Q.252		Method 1: 13.397 min; 346; Trans
Q.253		Method 2: 13.397 min; 342; Trans
Q.254		Method 1: 13.900 min; 356
Q.255		Mp 178-180° C. ClH

TABLE Q-continued

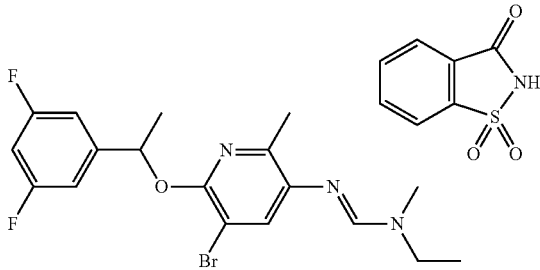
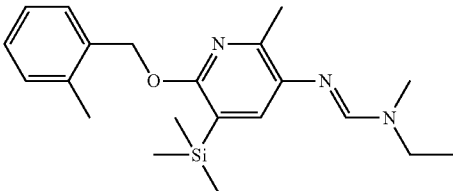
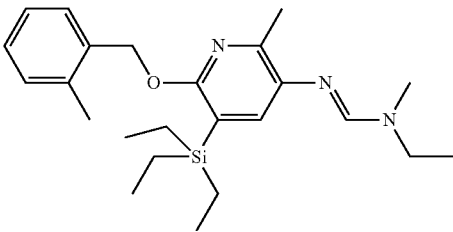
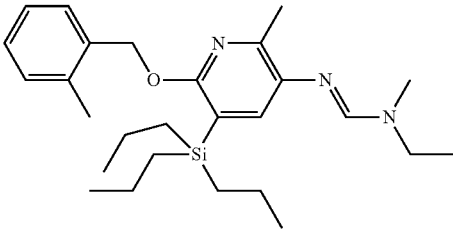
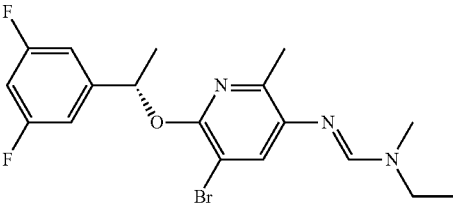
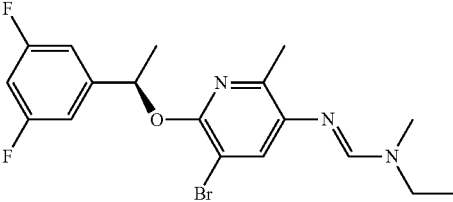
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.256		Mp 165-168° C.
Q.257		Method 3: 1.42 min; 370
Q.258		Method 3: 1.55 min; 412
Q.259		Method 3: 1.68 min; 454
Q.260		Method 3: 1.34 min; 412; (S)
Q.261		Method 3: 1.34 min; 412; (R)

TABLE Q-continued

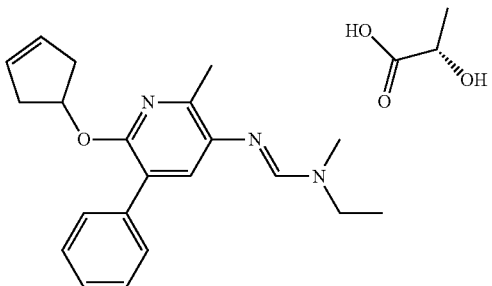
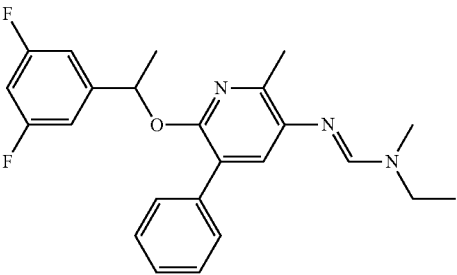
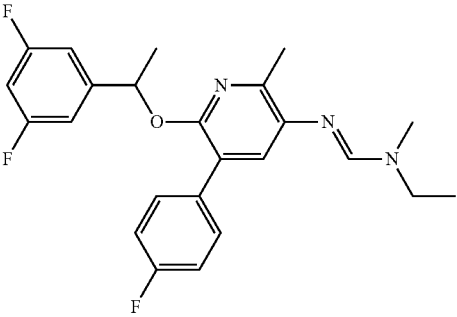
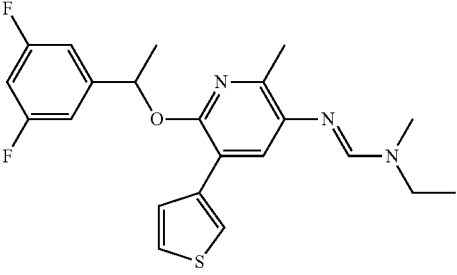
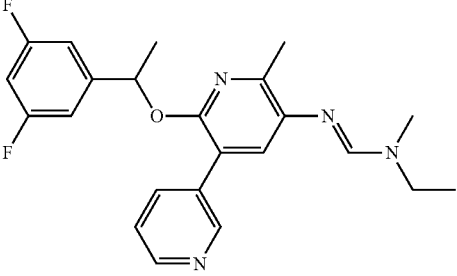
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.262		Ionic liquid
Q.263		Method 3: 1.41 min; 410
Q.264		Method 3: 1.42 min; 428
Q.265		Method 3 1.40 min; 416
Q.266		Method 3: 1.21 min; 411

TABLE Q-continued

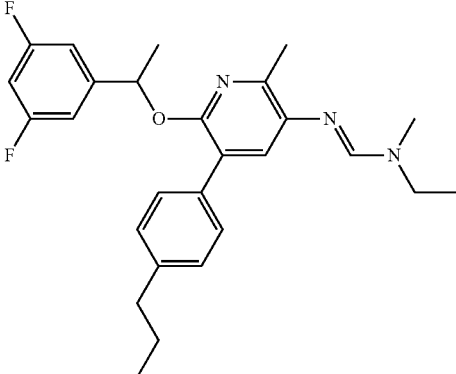
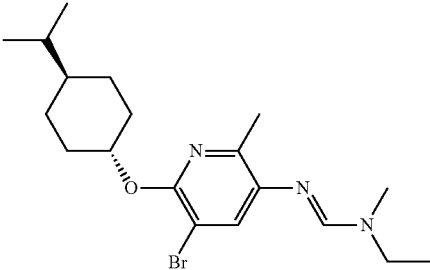
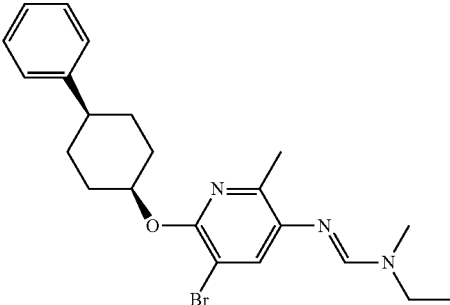
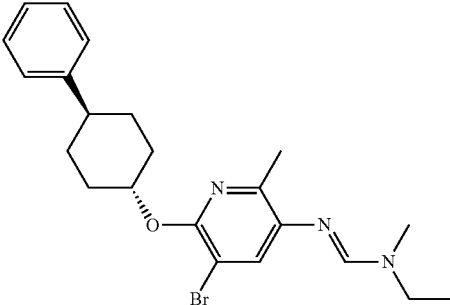
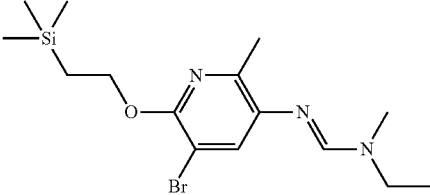
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.267		Method 3: 1.55 min; 452
Q.268		Method 3: 1.52 min; 396; Trans
Q.269		Method 3: 1.43 min; 430; Cis
Q.270		Mp 111-113° C.; Trans
Q.271		Method 1: 13.010 min; 372

TABLE Q-continued

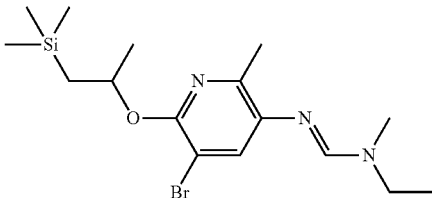
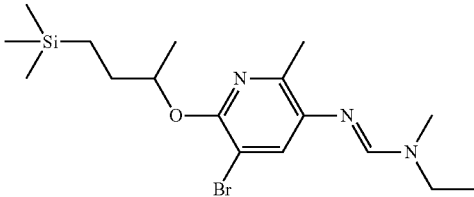
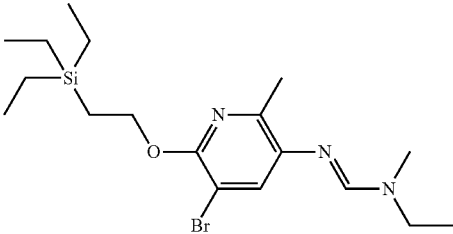
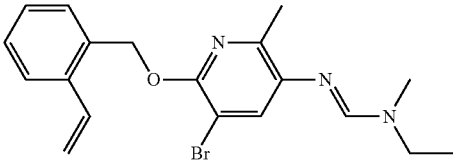
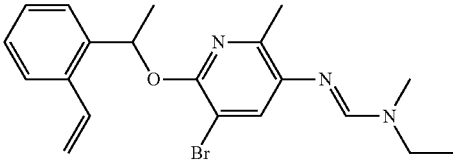
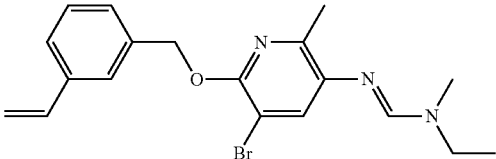
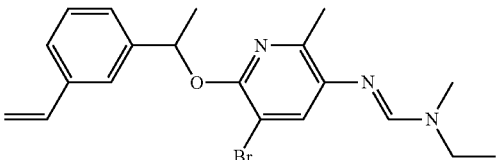
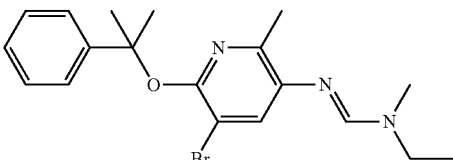
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.272		Method 1: 11.512 min; 386
Q.273		Method 1: 14.147 min; 400
Q.274		Method 1: 14.704 min; 414
Q.275		Method 1: 12.441 min; 388
Q.276		Method 1: 12.949 min; 402
Q.277		Method 1: 12.412 min; 388
Q.278		Method 1: 12.930 min; 402
Q.279		Method 1: 11.765 min; 390

TABLE Q-continued

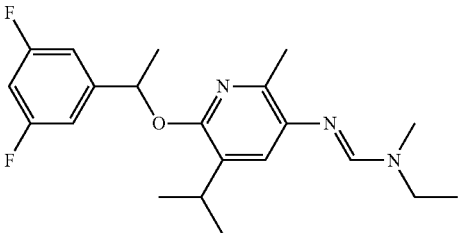
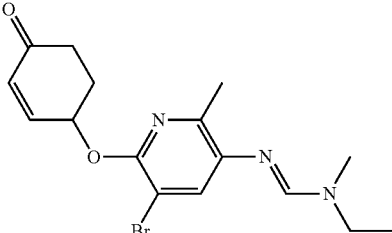
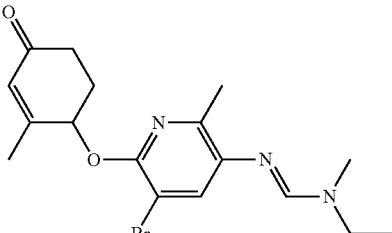
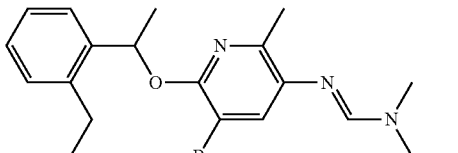
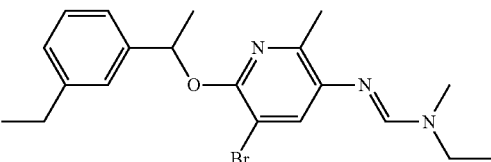
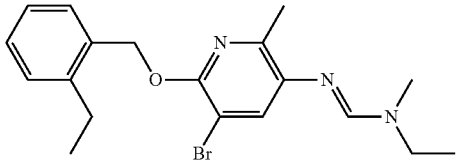
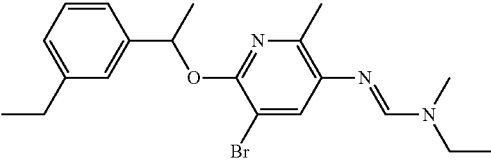
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.280		Method 1: 13.223 min; 376
Q.281		Method 1: 9.144 min; 366
Q.282		Method 1: 9.411 min; 380
Q.283		Method 1: 13.076 min; 404
Q.284		Method 1: 13.397 min; 404
Q.285		Method 1: 12.345 min; 390
Q.286		Method 1: 12.464 min; 390

TABLE Q-continued

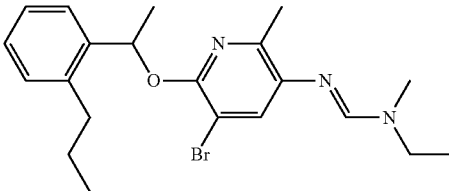
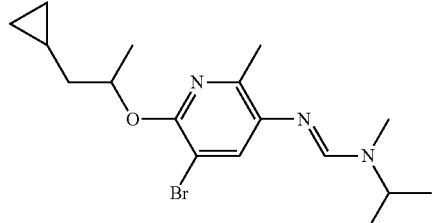
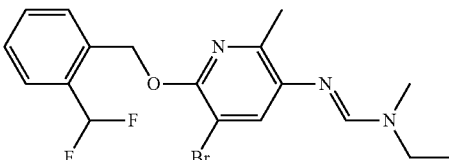
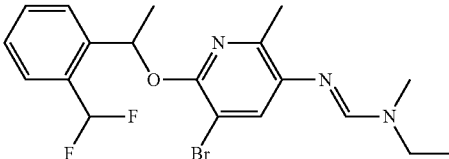
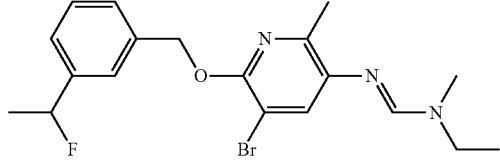
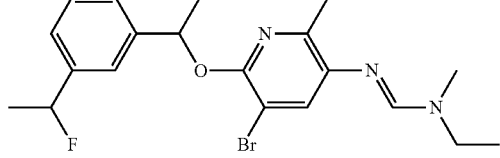
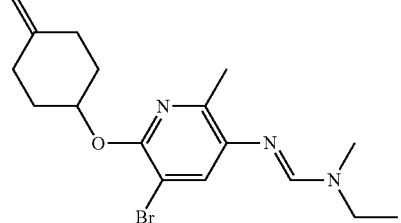
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.287		Method 1: 13.376 min; 418
Q.288		Method 2: 12.056 min; 354
Q.289		Method 1: 11.736 min; 412
Q.290		Mp 81-85° C.
Q.291		Method 1: 11.782 min; 408
Q.292		Method 1: 12.318 min; 422
Q.293		Method 1: 12.503 min; 366

TABLE Q-continued

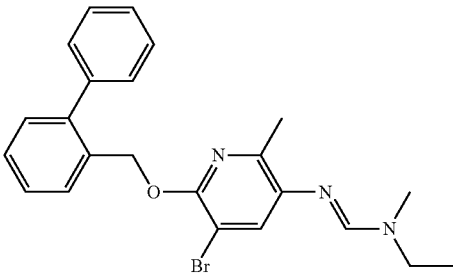
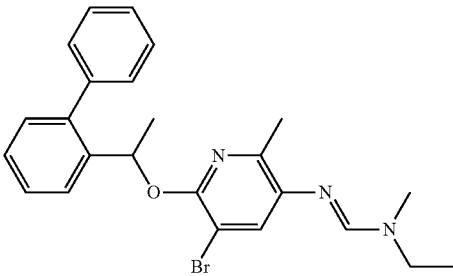
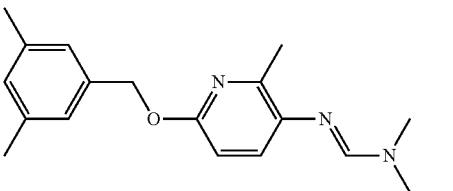
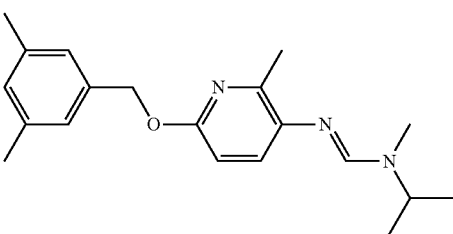
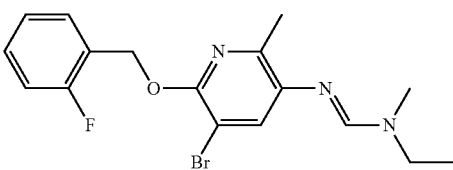
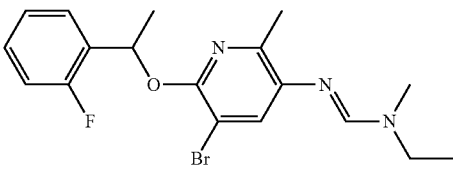
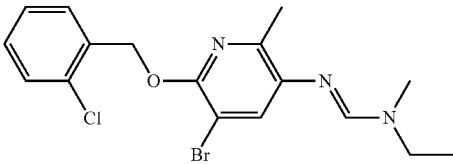
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.294		Method 1: 13.526 min; 438
Q.295		Mp 59-62° C.
Q.296		Method 1: 11.641 min; 312
Q.297		Method 1: 11.974 min; 326
Q.298		Mp 57-61° C.
Q.299		Method 1: 12.313 min; 394
Q.300		Mp 53-56° C.

TABLE Q-continued

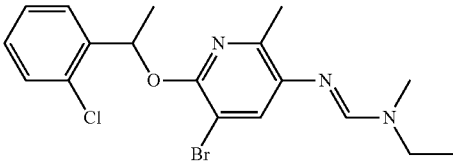
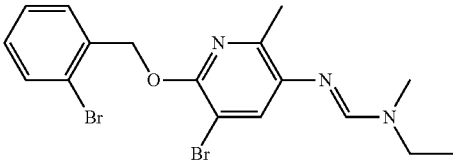
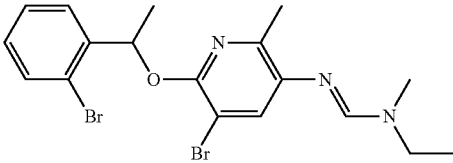
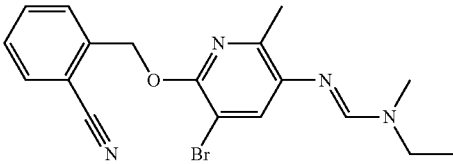
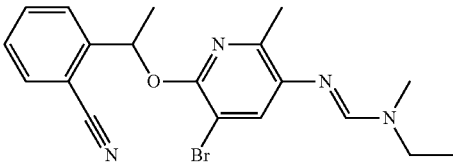
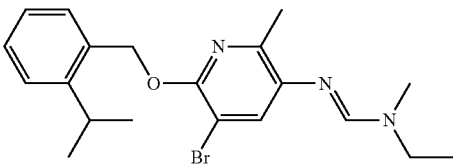
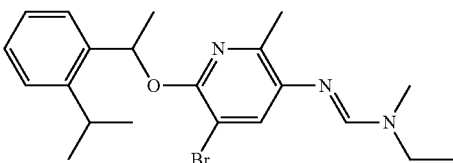
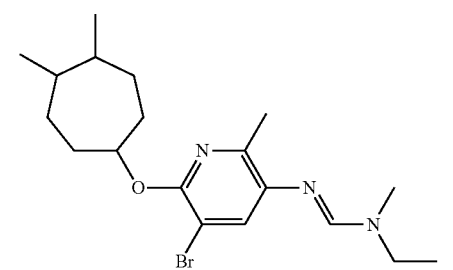
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.301		Method 1: 12.908 min; 410
Q.302		Method 1: 12.267 min; 440
Q.303		Method 1: 12.897 min; 454
Q.304		Mp 82-86° C.
Q.305		Mp 77-81° C.
Q.306		Method 1: 12.789 min; 404
Q.307		Method 1: 13.266 min; 418
Q.308		Method 1: 13.998 min; 396

TABLE Q-continued

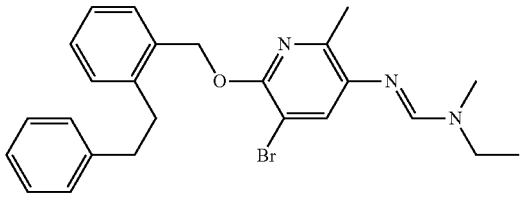
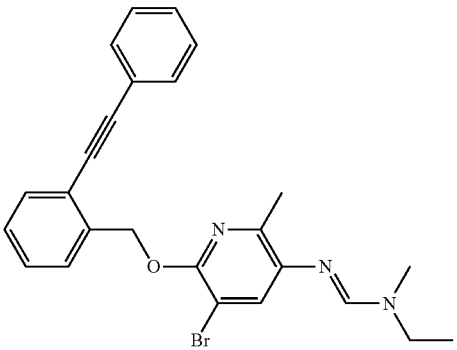
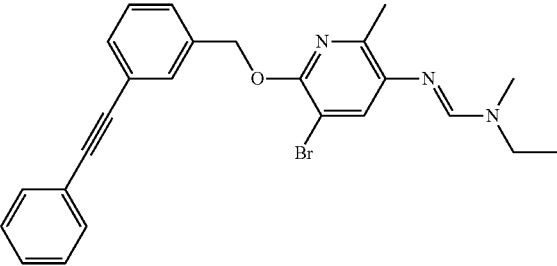
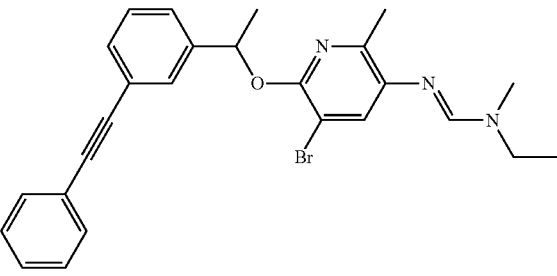
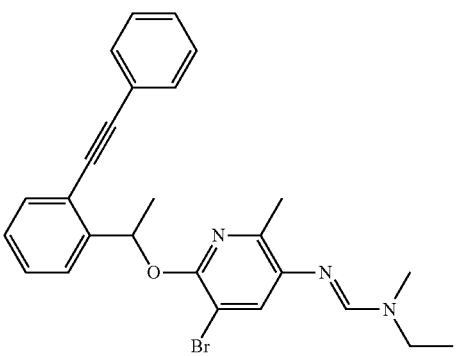
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.309		Method 1: 13.324 min; 466
Q.310		Method 1: 13.568 min; 462
Q.311		Method 1: 13.806 min; 462
Q.312		Method 1: 14.266 min; 476
Q.313		Method 1: 14.120 min; 476

TABLE Q-continued

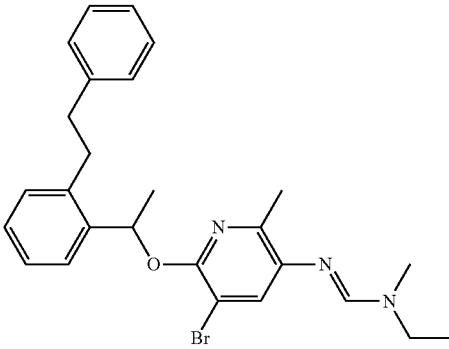
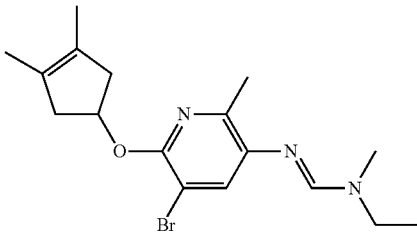
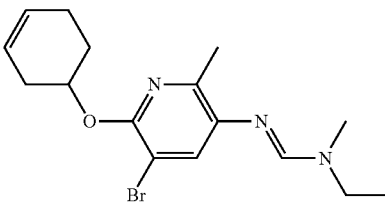
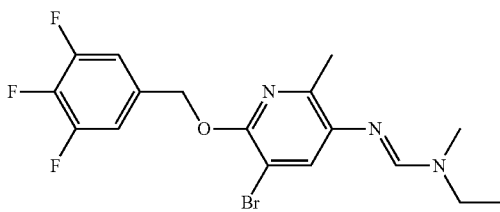
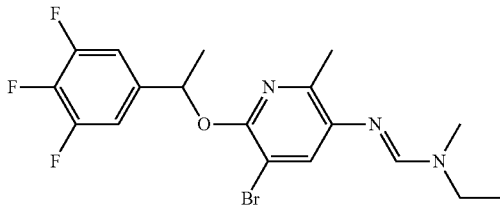
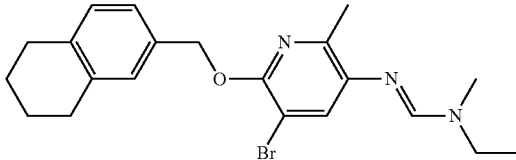
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.314		Method 1: 14.042 min; 480
Q.315		Method 1: 12.395 min; 366
Q.316		Method 1: 7.382 min; 352
Q.317		Mp 78-81° C.
Q.318		Method 1: 12.537 min; 430
Q.319		Method 1: 13.594 min; 416

TABLE Q-continued

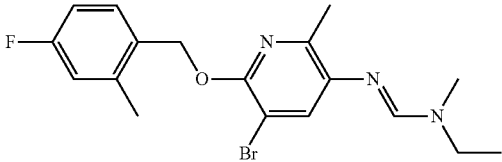
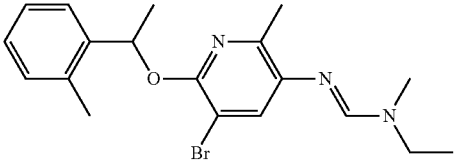
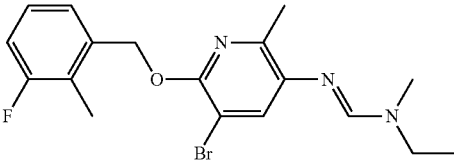
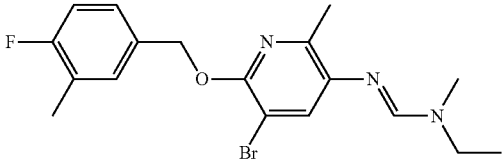
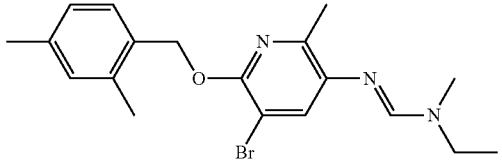
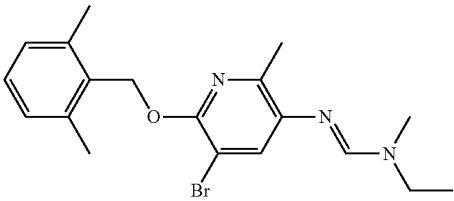
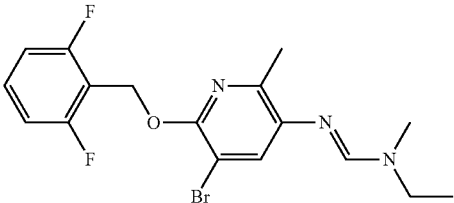
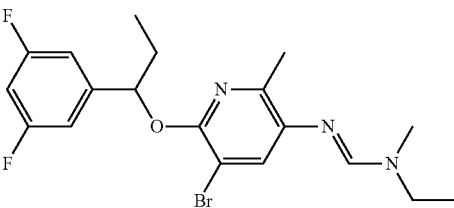
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.320		Mp 27-30° C.
Q.321		Method 1: 12.591 min; 390
Q.322		Mp 67-68° C.
Q.323		Mp 83-84° C.
Q.324		Method 1: 12.813 min; 390
Q.325		Mp 56-57° C.
Q.326		Mp 61-62° C.
Q.327		Method 1: 13.121 min; 426

TABLE Q-continued

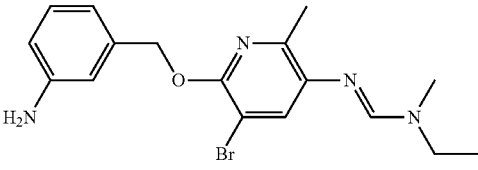
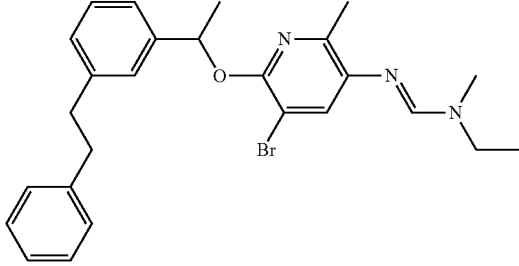
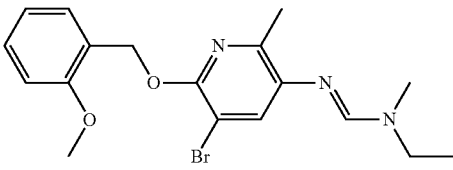
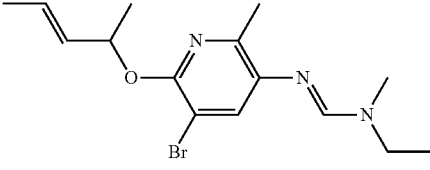
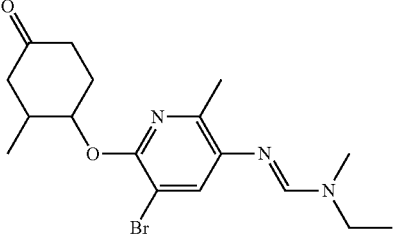
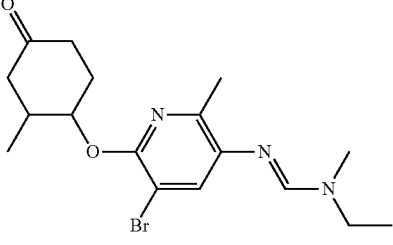
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.328		Liquid
Q.329		Method 1: 14.077 min; 480
Q.330		Method 1: 11.439 min; 392
Q.331		Method 1: 11.711 min; 340
Q.332		Method 1: 9.781 min; 382; Isomer 1
Q.333		Method 1: 9.758 min; 382 Isomer 2

TABLE Q-continued

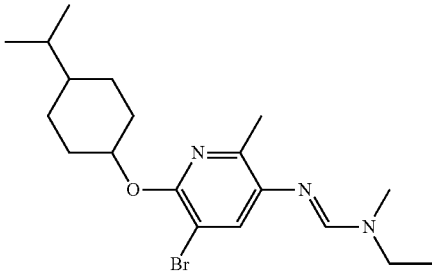
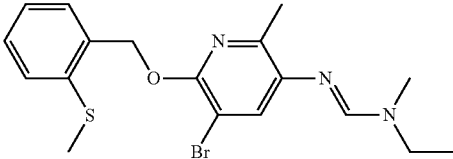
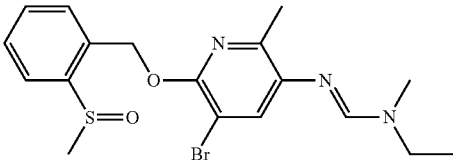
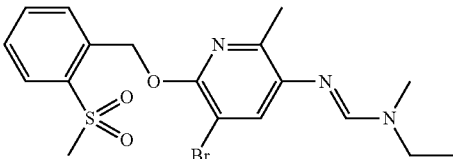
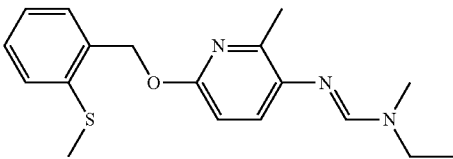
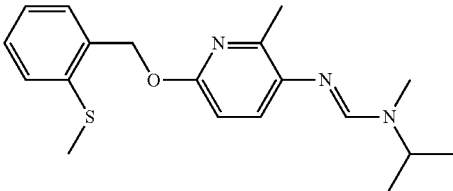
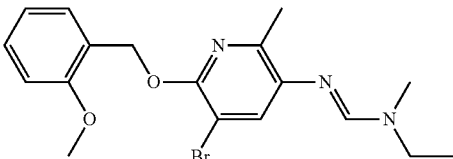
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.334		Method 6: 0.92 min; 396
Q.335		Method 1: 11.804 min; 408
Q.336		Method 1: 8.965 min; 424
Q.337		Mp 104-108° C.
Q.338		Method 1: 10.918 min; 331
Q.339		Method 1: 11.312 min; 344
Q.340		Method 1: 12.292 min; 366

TABLE Q-continued

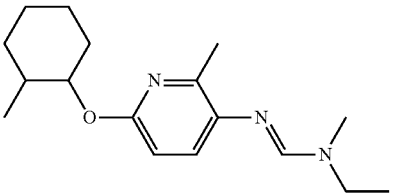
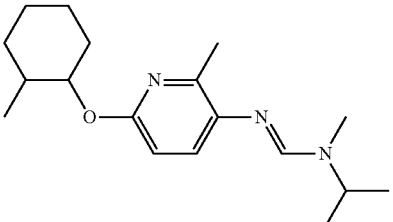
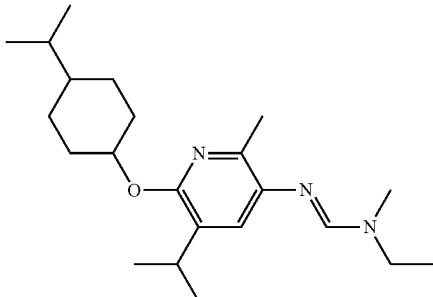
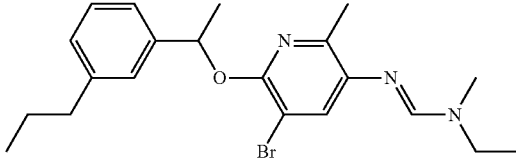
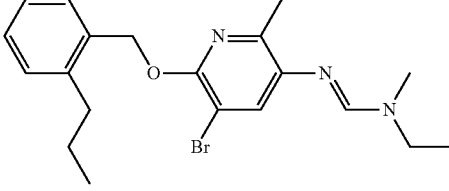
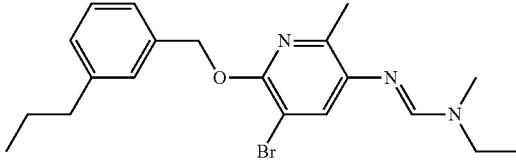
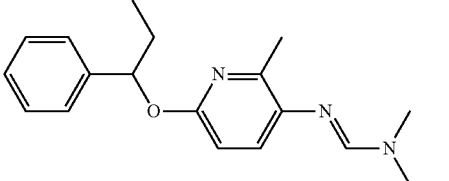
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.341		Method 1: 11.200 min; 290
Q.342		Method 1: 11.930 min; 304
Q.343		Method 1: 14.959 min; 360
Q.344		Method 1: 13.527 min; 418
Q.345		Method 1: 12.808 min; 404
Q.346		Method 1: 13.160 min; 404
Q.347		Method 1: 11.431 min; 312

TABLE Q-continued

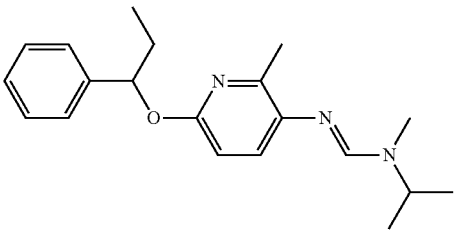
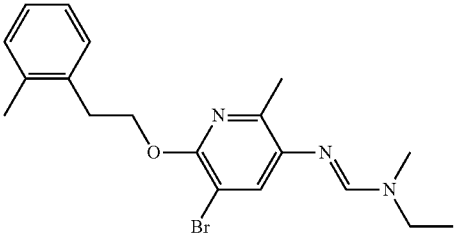
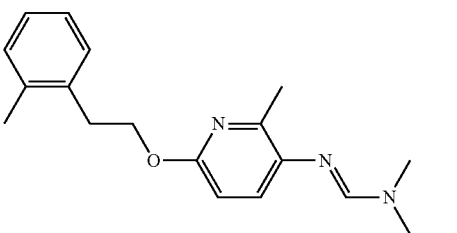
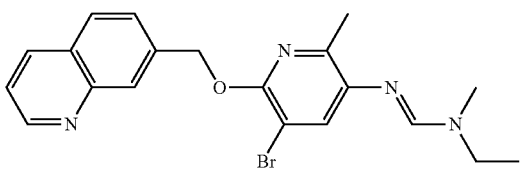
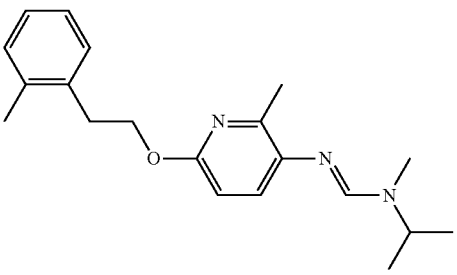
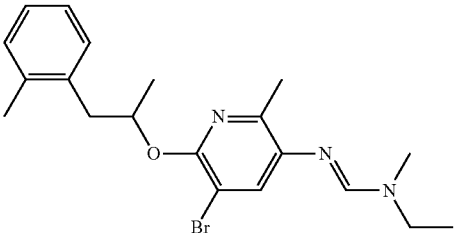
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.348		Method 1: 11.698 min; 326
Q.349		Method 1: 12.595 min; 390
Q.350		Method 1: 11.248 min; 312
Q.351		Mp 110-114° C.
Q.352		Method 1: 11.715 min; 326
Q.353		Method 1: 12.754 min; 404

TABLE Q-continued

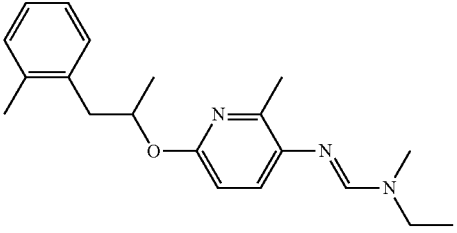
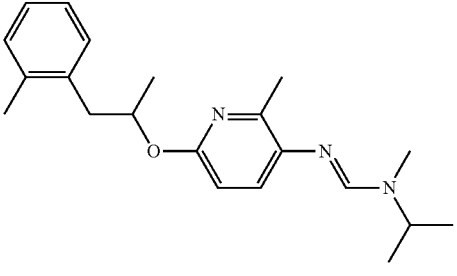
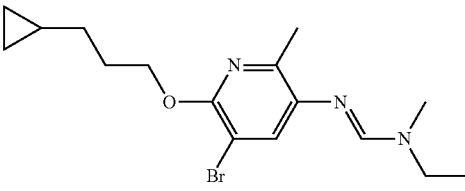
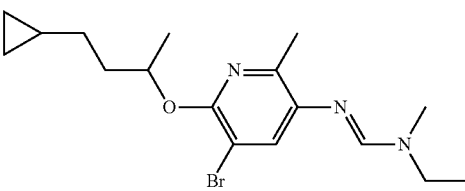
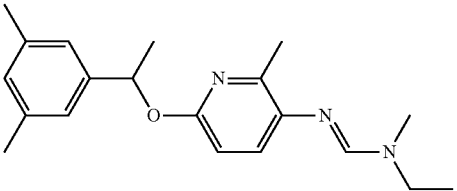
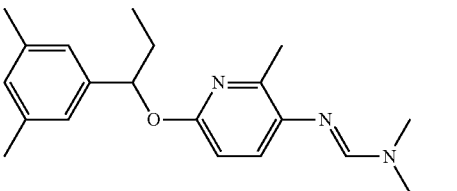
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.354		Method 1: 11.787 min; 326
Q.355		Method 1: 12.370 min; 340
Q.356		Method 1: 12.096 min; 354
Q.357		Method 1: 12.656 min; 368
Q.358		Method 1: 11.887 min; 326
Q.359		Method 1: 12.700 min; 340

TABLE Q-continued

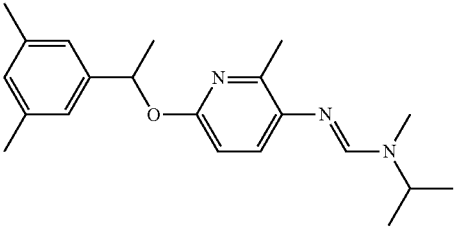
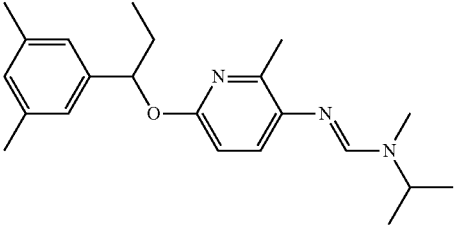
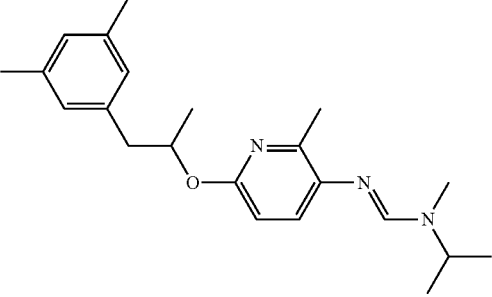
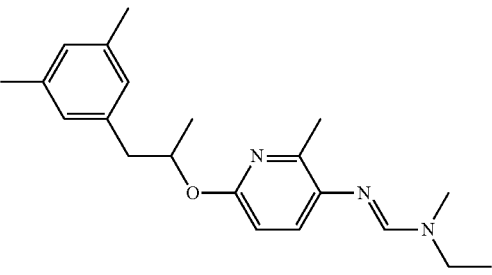
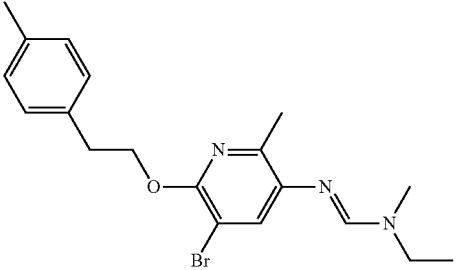
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.360		Method 1: 12.328 min; 340
Q.361		Method 1: 12.882 min; 354
Q.362		Method 1: 15.320 min; 354
Q.363		Method 1: 12.506 min; 341
Q.364		Method 1: 12.385 min; 390

TABLE Q-continued

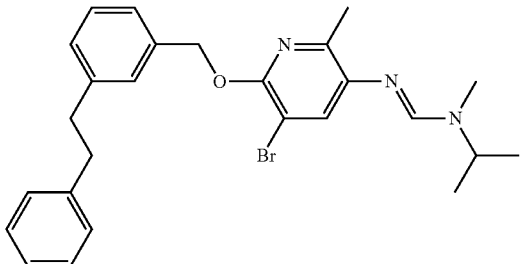
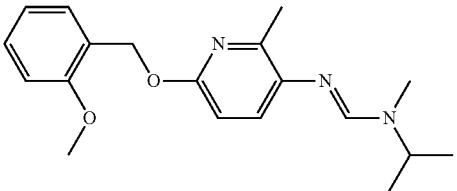
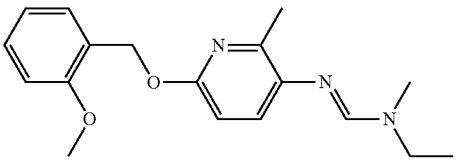
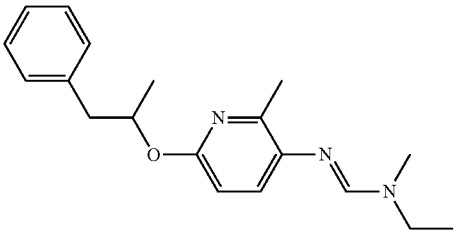
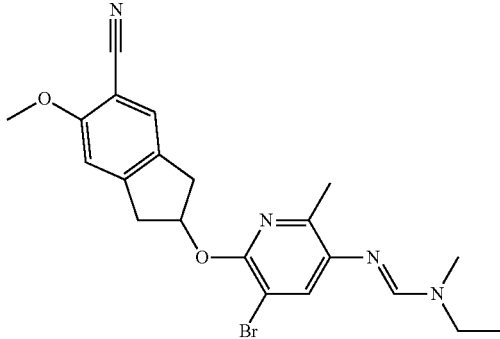
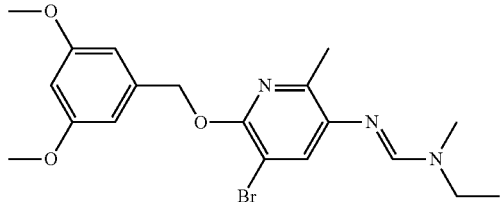
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.365		Method 1: 13.743 min; 466
Q.366		Method 1: 10.775 min; 328
Q.367		Method 1: 10.377 min; 314
Q.368		Method 1: 11.191 min; 312
Q.369		Mp 120-121° C.
Q.370		Method 1: 11.282 min; 423

TABLE Q-continued

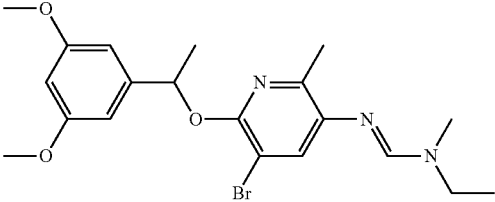
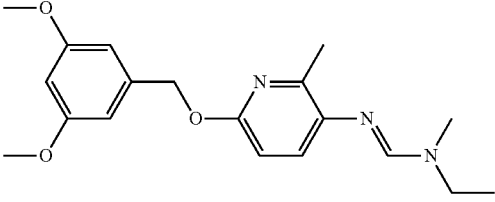
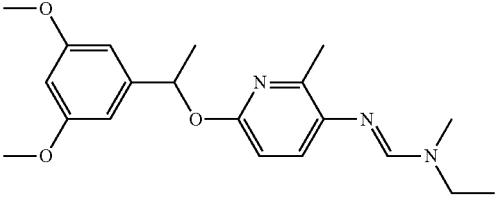
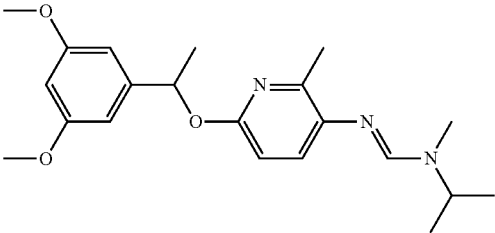
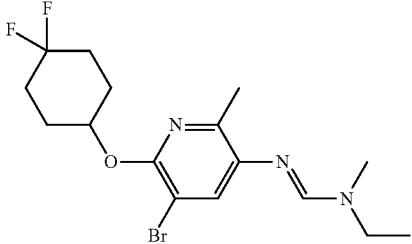
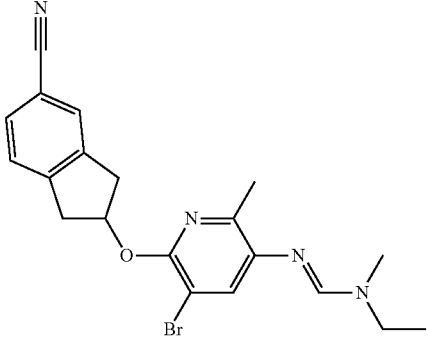
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.371		Method 1: 11.875 min; 272
Q.372		Method 1: 10.334 min; 344
Q.373		Method 1: 10.676 min; 358
Q.374		Method 1: 11.096 min; 372
Q.375		Method 1: 11.418 min; 390
Q.376		Method 1: 11.717 min; 413

TABLE Q-continued

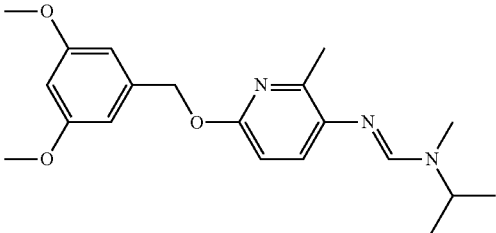
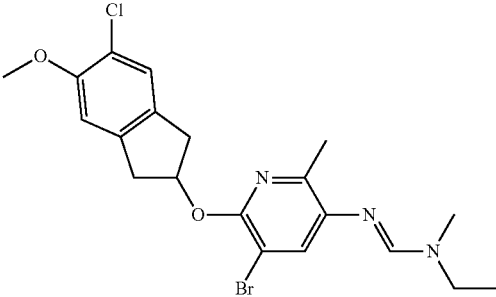
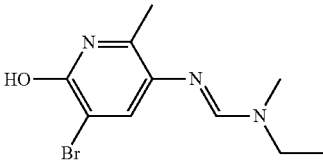
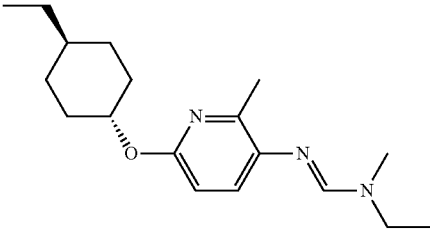
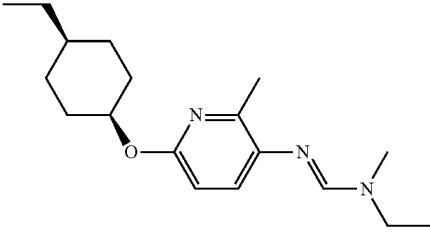
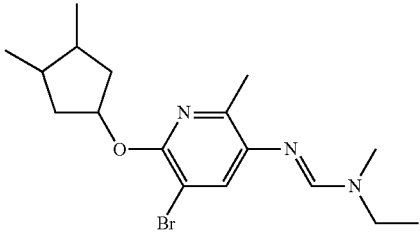
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.377		Method 1: 10.791 min; 358
Q.378		Method 1: 12.258 min; 452
Q.379		Mp 168-170° C.
Q.380		Method 1: 12.229 min; 304; Trans
Q.381		Method 1: 12.388 min; 305; Cis
Q.382		Method 1: 12.998 min; 368

TABLE Q-continued

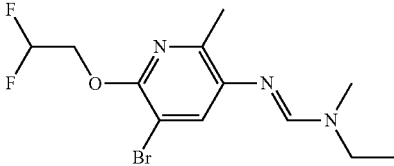
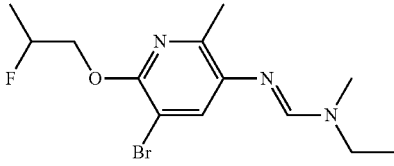
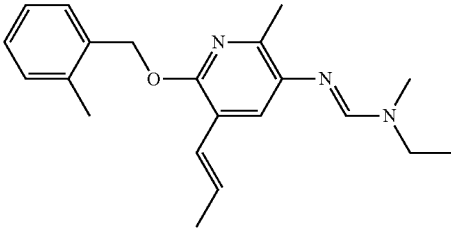
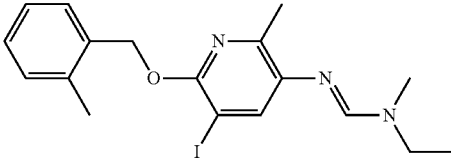
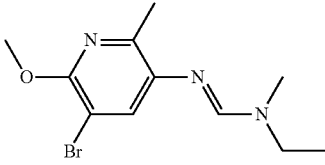
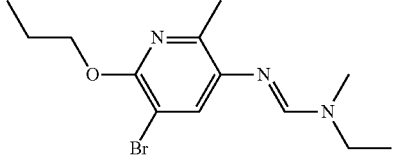
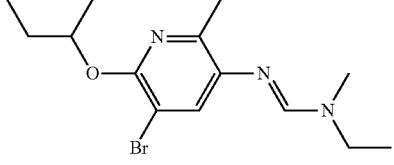
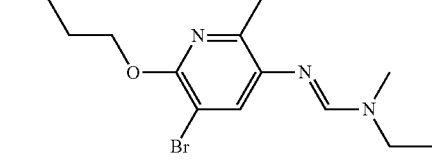
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.383		Method 6: 0.61 min; 336
Q.384		Method 6: 0.67 min; 332
Q.385		Method 3: 1.34 min; 338
Q.386		Method 3: 1.34 min; 424
Q.387		Method 6: 0.55 min; 286
Q.388		Method 6: 0.73 min; 314
Q.389		Method 6: 0.79 min; 328
Q.390		Method 6: 0.79 min; 328

TABLE Q-continued

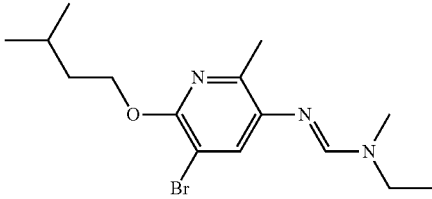
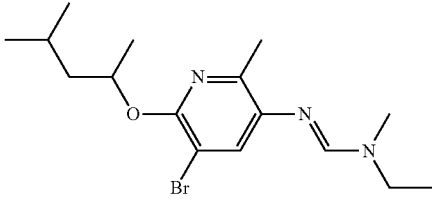
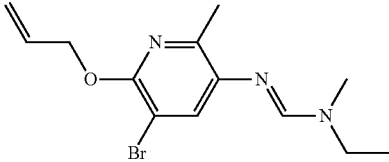
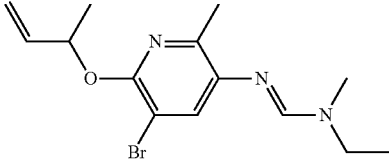
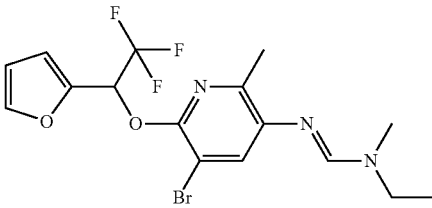
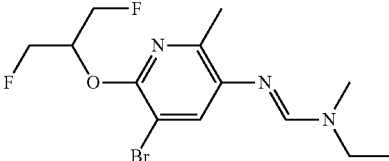
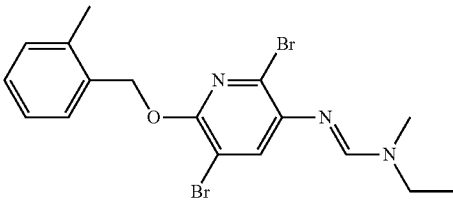
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.391		Method 6: 0.83 min; 342
Q.392		Method 6: 0.88 min; 356
Q.393		Method 6: 0.69 min; 312
Q.394		Method 6: 0.76 min; 326
Q.395		Method 6: 0.79 min; 420
Q.396		Method 6: 0.60 min; 350
Q.397		Method 6: 0.93 min; 442

TABLE Q-continued

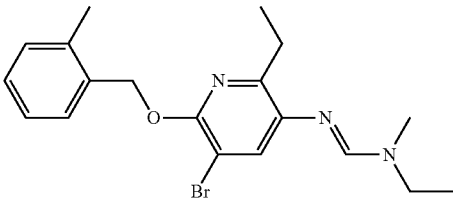
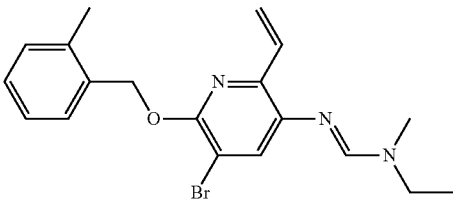
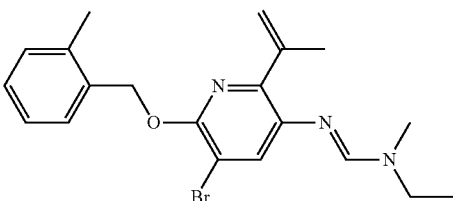
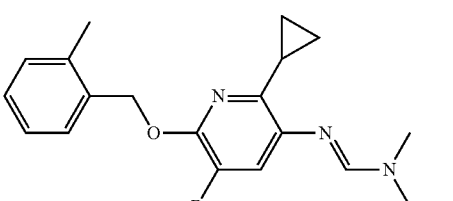
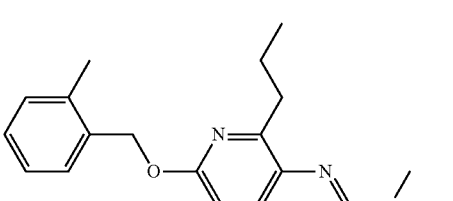
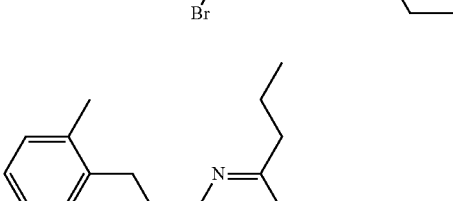
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.398		Method 6: 0.86 min; 392
Q.399		Method 6: 0.89 min; 390
Q.400		Method 6: 0.83 min; 404
Q.401		Method 6: 0.89 min; 404
Q.402		Method 6: 0.88 min; 406
Q.403		Method 6: 0.99 min; 369

TABLE Q-continued

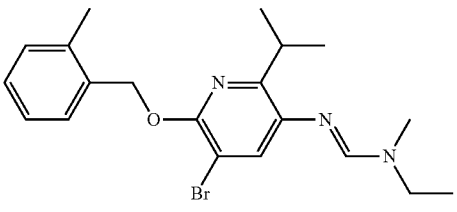
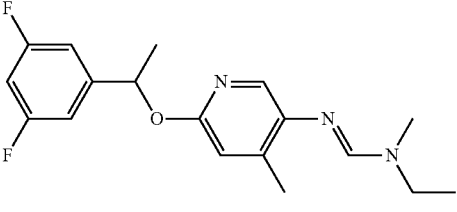
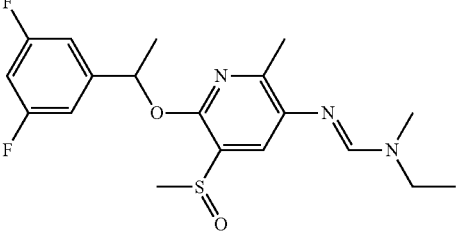
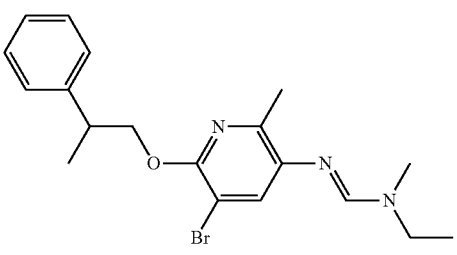
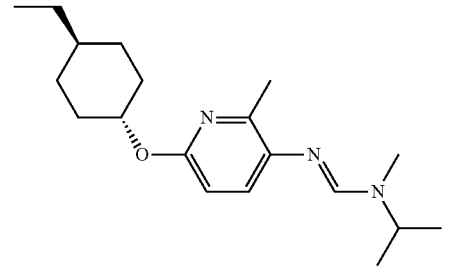
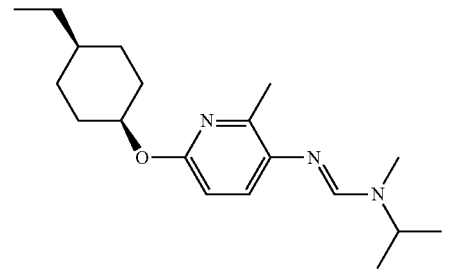
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.404		Method 6: 0.92 min; 406
Q.405		Method 6: 0.54 min; 334
Q.406		Method 1: 8.584 min; 396
Q.407		Method 1: 12.363 min; 392
Q.408		Method 1: 12.632 min; 319; Trans
Q.409		Method 1: 12.533 min; 319; Cis

TABLE Q-continued

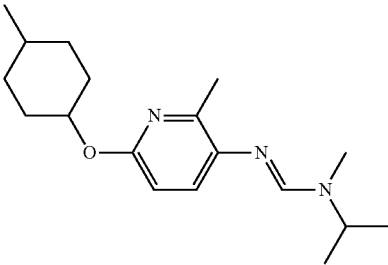
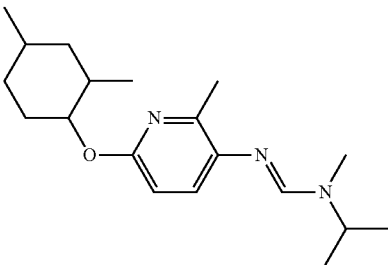
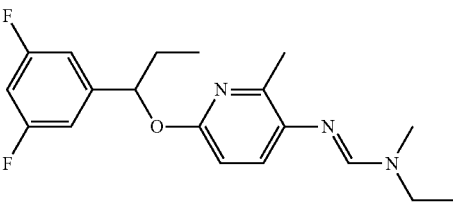
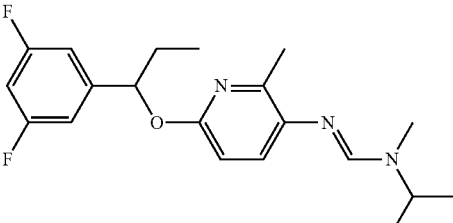
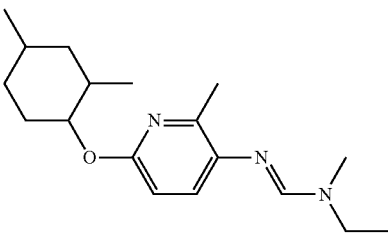
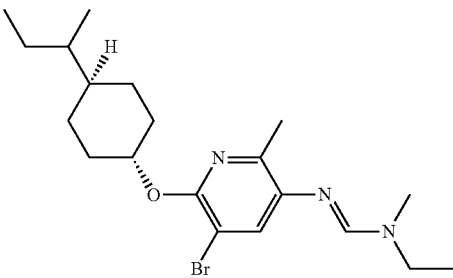
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.410		Method 1: 11.796 min; 304
Q.411		Method 1: 12.661 min; 318
Q.412		Method 1: 14.132 min; 348
Q.413		Method 1: 14.531 min; 362
Q.414		Method 1: 12.019 min; 304
Q.415		Mp 81-83° C.

TABLE Q-continued

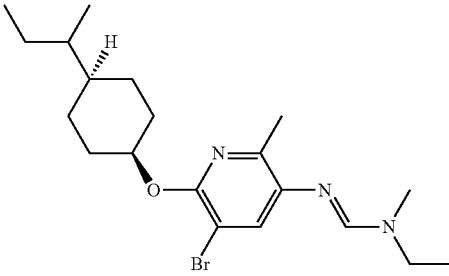
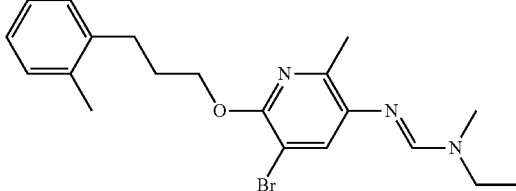
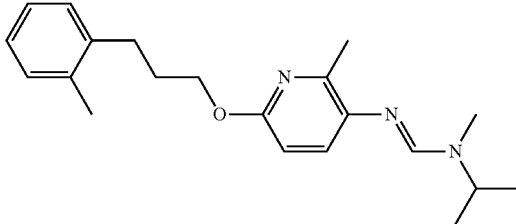
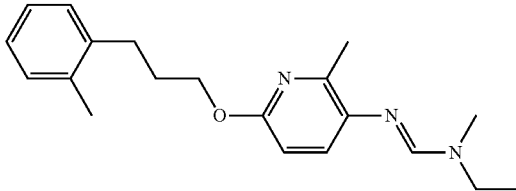
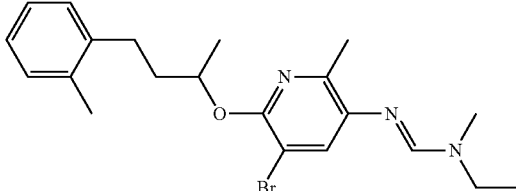
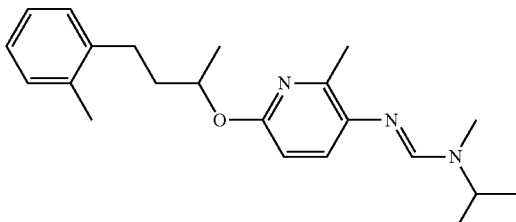
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.416		Method 1: 14.621 min; 410
Q.417		Method 1: 15.162 min; 404
Q.418		Method 1: 14.413 min; 340
Q.419		Method 1: 13.860 min; 326
Q.420		Method 1: 13.191 min; 418
Q.421		Method 1: 12.542 min; 354

TABLE Q-continued

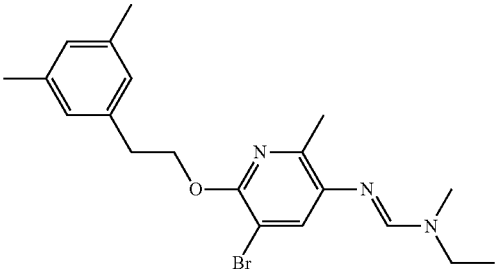
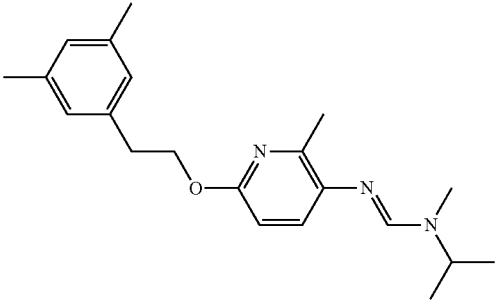
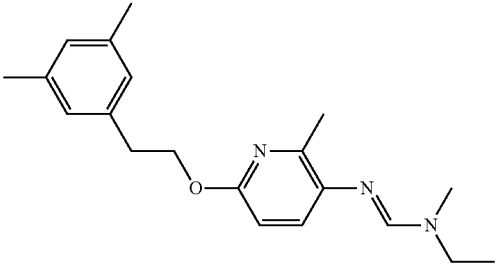
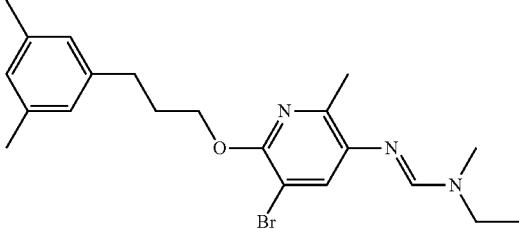
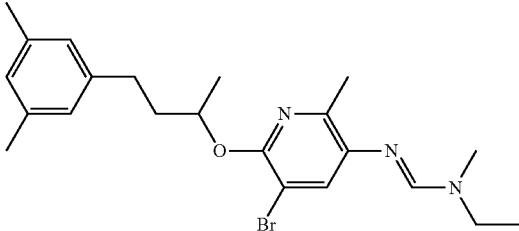
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.422		Mp 61-63° C.
Q.423		Method 1: 12.785 min; 340
Q.424		Method 1: 12.041 min; 326
Q.425		Method 1: 13.378 min; 418
Q.426		Method 1: 13.958 min; 432

TABLE Q-continued

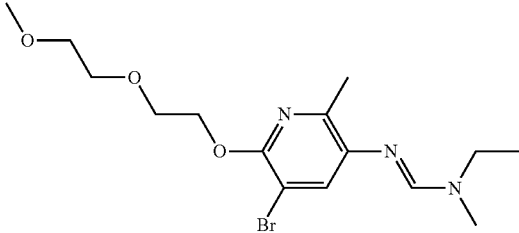
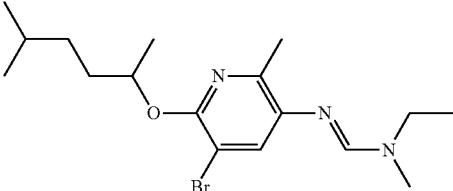
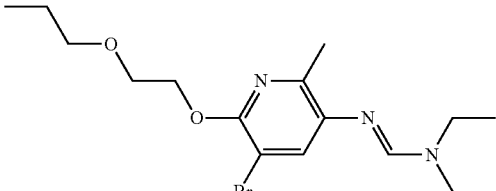
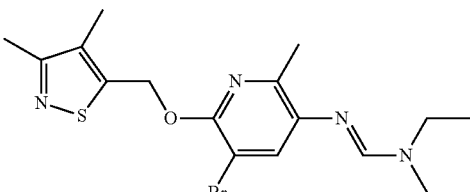
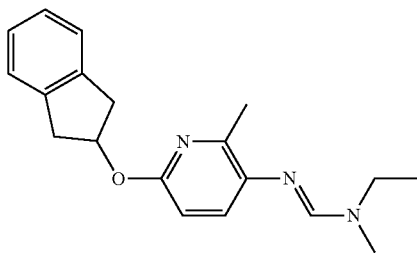
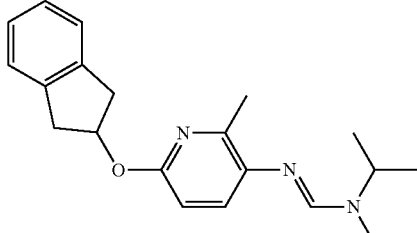
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.427		Method 1: 8.845 min; 374
Q.428		Method 1: 13.142 min; 370
Q.429		Method 1: 10.416 min; 358
Q.430		Mp 122-124° C.
Q.431		Method 1: 10.943 min; 310
Q.432		Method 1: 11.341 min; 324

TABLE Q-continued

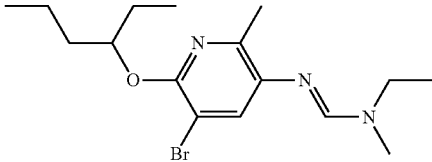
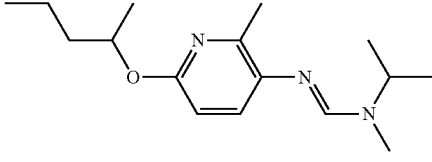
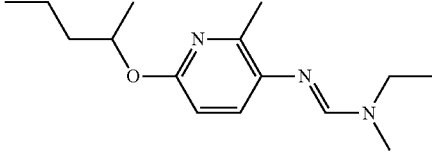
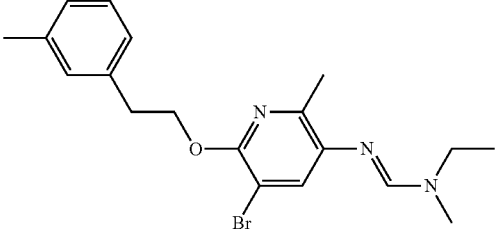
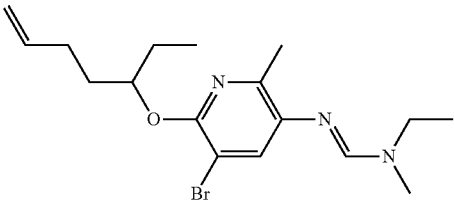
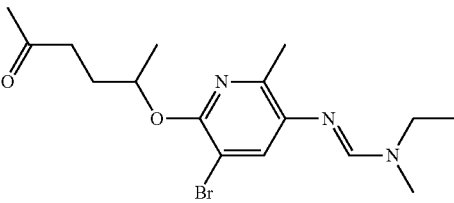
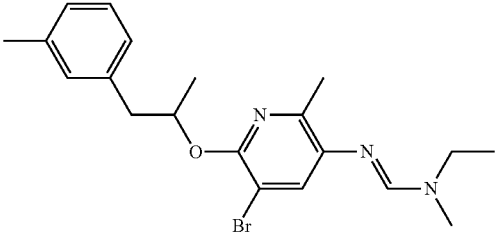
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.433		Method 1: 12.746 min; 356
Q.434		Method 1: 10.964 min; 278
Q.435		Method 1: 10.497 min; 264
Q.436		Method 1: 12.277 min; 390
Q.437		Method 1: 12.606 min; 368
Q.438		Method 1: 9.727 min; 370
Q.439		Method 1: 12.860 min; 404

TABLE Q-continued

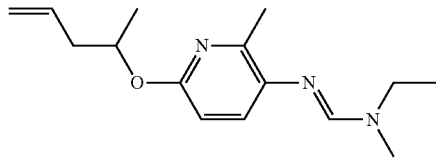
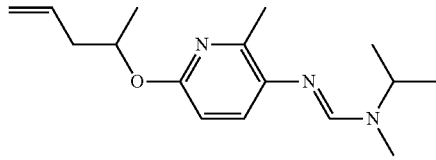
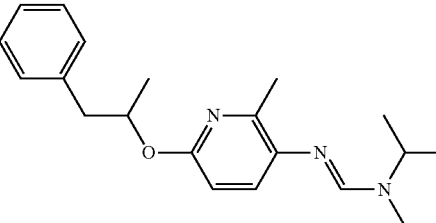
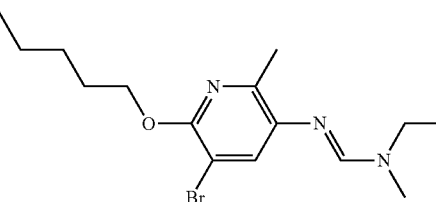
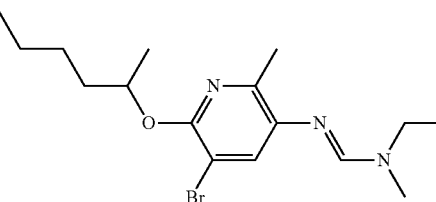
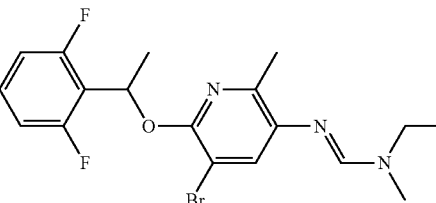
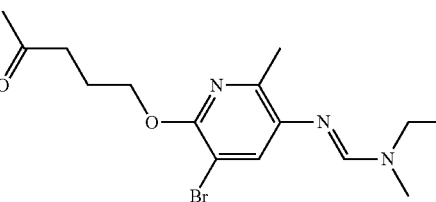
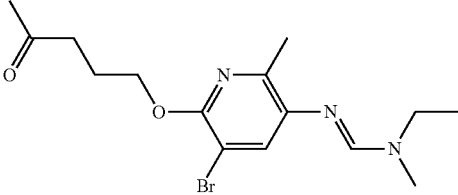
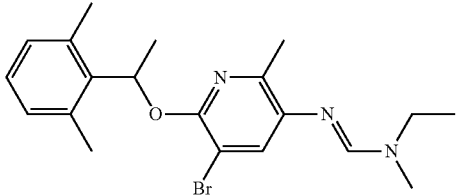
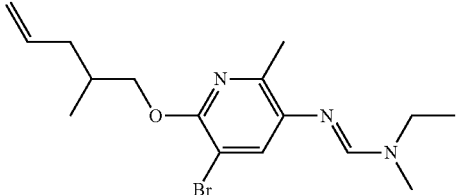
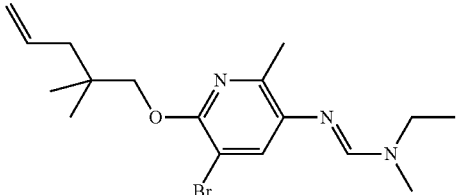
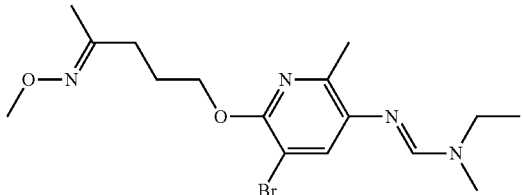
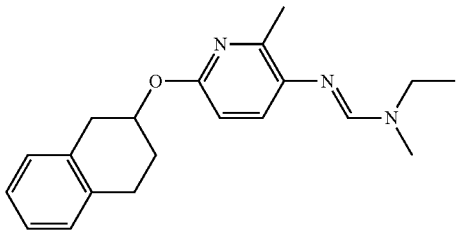
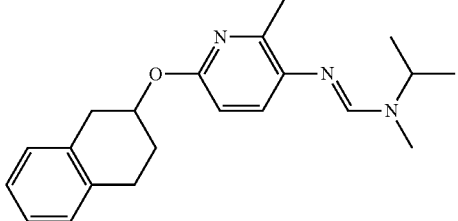
		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.440		Method 1: 10.054 min; 262
Q.441		Method 1: 12.781 min; 276
Q.442		Method 1: 13.922 min; 326
Q.443		Method 1: 12.141 min; 342
Q.444		Method 1: 12.715 min; 356
Q.445		Method 1: 11.909 min; 412
Q.446		Method 1: 9.174 min; 356

TABLE Q-continued

		LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.447		Method 1: 9.174 min; 356
Q.448		Mp 106-107° C.
Q.449		Method 1: 12.070 min; 354
Q.450		Method 1: 12.652 min; 368
Q.451		Method 1: 10.212 min; 385
Q.452		Method 1: 11.435 min; 324
Q.453		Method 1: 11.704 min; 338

	LC-Method: R _t (min); MS-ESI (m/z; (M + H) ⁺)
Q.454	Mp 85-87° C.
Biological Examples	
<p><i>Blumeria graminis</i> f. sp. <i>tritici</i> (<i>Erysiphe graminis</i> f. sp. <i>tritici</i>)/Wheat/Leaf Disc Preventative (Powdery Mildew on Wheat)</p>	
<p>Wheat leaf segments cv. Kanzler were placed on agar in a multiwell plate (24-well format) and sprayed with the formulated test compound diluted in water. The leaf disks were inoculated by shaking powdery mildew infected plants above the test plates 1 day after application. The inoculated leaf disks were incubated at 20° C. and 60% rh under a light regime of 24 h darkness followed by 12 h light/12 h darkness in a climate chamber and the activity of a compound was assessed as percent disease control compared to untreated when an appropriate level of disease damage appears on untreated check leaf segments (6-8 days after application).</p>	
<p>The following compounds gave at 200 ppm give at least 50% disease control in this test when compared to untreated control leaf disks under the same conditions, which show extensive disease development:</p>	
<p>Q.001, Q.004, Q.005, Q.006, Q.007, Q.010, Q.011, Q.012, Q.013, Q.014, Q.015, Q.016, Q.017, Q.018, Q.019, Q.020, Q.021, Q.022, Q.023, Q.024, Q.025, Q.026, Q.027, Q.028, Q.029, Q.030, Q.031, Q.032, Q.033, Q.034, Q.035, Q.036, Q.037, Q.038, Q.039, Q.040, Q.041, Q.042, Q.043, Q.044, Q.045, Q.046, Q.047, Q.048, Q.049, Q.050, Q.051, Q.052, Q.053, Q.054, Q.055, Q.057, Q.058, Q.059, Q.060, Q.062, Q.063, Q.064, Q.065, Q.066, Q.067, Q.068, Q.069, Q.070, Q.071, Q.072, Q.073, Q.074, Q.075, Q.076, Q.077, Q.078, Q.079, Q.080, Q.081, Q.082, Q.084, Q.085, Q.086, Q.087, Q.088, Q.089, Q.090, Q.091, Q.092, Q.093, Q.094, Q.095, Q.097, Q.098, Q.099, Q.100, Q.101, Q.102, Q.103, Q.104, Q.105, Q.106, Q.108, Q.109, Q.110, Q.111, Q.112, Q.113, Q.114, Q.115, Q.116, Q.117, Q.118, Q.119, Q.120, Q.121, Q.122, Q.123, Q.124, Q.125, Q.126, Q.127, Q.128, Q.129, Q.130, Q.131, Q.132, Q.133, Q.134, Q.135, Q.136, Q.140, Q.141, Q.142, Q.143, Q.144, Q.145, Q.146, Q.147, Q.148, Q.149, Q.151, Q.152, Q.153, Q.154, Q.155, Q.156, Q.158, Q.160, Q.161, Q.162, Q.163, Q.164, Q.165, Q.166, Q.167, Q.168, Q.170, Q.171, Q.172, Q.174, Q.175, Q.176, Q.177, Q.178, Q.179, Q.180, Q.181, Q.183, Q.184, Q.185, Q.186, Q.187, Q.188, Q.191, Q.192, Q.193, Q.195, Q.196, Q.197, Q.198, Q.199, Q.200, Q.201, Q.202, Q.203, Q.204, Q.205, Q.206, Q.207, Q.208, Q.209, Q.211, Q.212, Q.213, Q.214, Q.215, Q.216, Q.217, Q.218, Q.219, Q.220, Q.221, Q.222, Q.223, Q.224, Q.225, Q.226, Q.227, Q.228, Q.229, Q.230, Q.231, Q.233, Q.235, Q.238, Q.239, Q.240, Q.241, Q.242, Q.243, Q.244, Q.245, Q.246, Q.247, Q.248, Q.249, Q.250, Q.251, Q.255, Q.256, Q.260, Q.261, Q.262, Q.263, Q.265, Q.267, Q.269, Q.270, Q.271, Q.272, Q.273, Q.274, Q.275,</p>	
	<p>Q.276, Q.277, Q.278, Q.280, Q.281, Q.282, Q.283, Q.284, Q.285, Q.286, Q.287, Q.288, Q.289, Q.290, Q.291, Q.292, Q.293, Q.294, Q.296, Q.297, Q.298, Q.299, Q.300, Q.301, Q.302, Q.303, Q.304, Q.305, Q.306, Q.307, Q.308, Q.309, Q.310, Q.312, Q.315, Q.316, Q.317, Q.318, Q.319, Q.320, Q.321, Q.322, Q.323, Q.324, Q.325, Q.326, Q.327, Q.329, Q.330, Q.331, Q.332, Q.333, Q.334, Q.335, Q.336, Q.337, Q.338, Q.339, Q.340, Q.341, Q.342, Q.343, Q.344, Q.345, Q.346, Q.347, Q.349, Q.350, Q.351, Q.352, Q.353, Q.354, Q.355, Q.356, Q.357, Q.358, Q.359, Q.360, Q.361, Q.364, Q.365, Q.367, Q.368, Q.369, Q.370, Q.371, Q.373, Q.374, Q.375, Q.376, Q.378, Q.380, Q.381, Q.382, Q.383, Q.384, Q.385, Q.386, Q.388, Q.389, Q.390, Q.391, Q.392, Q.393, Q.394, Q.397, Q.398, Q.400, Q.401</p>
	<p><i>Puccinia recondita</i> f. sp. <i>tritici</i>/Wheat/Leaf Disc Preventative (Brown Rust)</p>
	<p>Wheat leaf segments cv. Kanzler were placed on agar in multiwell plates (24-well format) and sprayed with the formulated test compound diluted in water. The leaf disks were inoculated with a spore suspension of the fungus 1 day after application. The inoculated leaf segments were incubated at 19° C. and 75% rh under a light regime of 12 h light/12 h darkness in a climate cabinet and the activity of a compound was assessed as percent disease control compared to untreated when an appropriate level of disease damage appears in untreated check leaf segments (7-9 days after application).</p>
	<p>The following compounds gave at 200 ppm gave at least 50% disease control in this test when compared to untreated control leaf disks under the same conditions, which show extensive disease development:</p>
	<p>Q.001, Q.002, Q.003, Q.004, Q.005, Q.006, Q.007, Q.008, Q.009, Q.010, Q.011, Q.012, Q.013, Q.014, Q.015, Q.016, Q.017, Q.018, Q.019, Q.020, Q.021, Q.022, Q.023, Q.024, Q.025, Q.026, Q.027, Q.028, Q.029, Q.030, Q.031, Q.032, Q.033, Q.034, Q.035, Q.036, Q.037, Q.038, Q.039, Q.040, Q.041, Q.042, Q.043, Q.044, Q.045, Q.046, Q.047, Q.048, Q.049, Q.050, Q.051, Q.052, Q.053, Q.054, Q.055, Q.056, Q.057, Q.058, Q.059, Q.060, Q.061, Q.062, Q.063, Q.064, Q.065, Q.066, Q.067, Q.068, Q.069, Q.070, Q.071, Q.072, Q.073, Q.074, Q.075, Q.076, Q.077, Q.078, Q.079, Q.080, Q.081, Q.082, Q.083, Q.084, Q.085, Q.086, Q.087, Q.088, Q.089, Q.090, Q.091, Q.092, Q.093, Q.094, Q.095, Q.096, Q.097, Q.098, Q.099, Q.100, Q.101, Q.102, Q.103, Q.104, Q.105, Q.106, Q.107, Q.108, Q.109, Q.110, Q.111, Q.112, Q.113, Q.114, Q.115, Q.116, Q.117, Q.118, Q.119, Q.120, Q.121, Q.122, Q.123, Q.124, Q.125, Q.126, Q.127, Q.128, Q.129, Q.130, Q.131, Q.132, Q.133, Q.134, Q.135, Q.136, Q.137, Q.138, Q.140, Q.141, Q.142, Q.143, Q.144, Q.145, Q.146, Q.147, Q.148, Q.149, Q.150, Q.151, Q.152, Q.153, Q.154, Q.155, Q.156, Q.157, Q.158, Q.159, Q.160, Q.161,</p>

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Q.162, Q.163, Q.164, Q.165, Q.166, Q.167, Q.168, Q.169, Q.170, Q.171, Q.172, Q.173, Q.174, Q.175, Q.176, Q.177, Q.178, Q.179, Q.180, Q.181, Q.182, Q.183, Q.184, Q.185, Q.186, Q.187, Q.188, Q.189, Q.190, Q.191, Q.192, Q.193, Q.194, Q.195, Q.196, Q.197, Q.198, Q.199, Q.200, Q.201, Q.202, Q.203, Q.204, Q.205, Q.206, Q.207, Q.208, Q.209, Q.210, Q.211, Q.212, Q.213, Q.214, Q.215, Q.216, Q.217, Q.218, Q.219, Q.220, Q.221, Q.222, Q.223, Q.224, Q.225, Q.226, Q.227, Q.228, Q.229, Q.230, Q.231, Q.232, Q.233, Q.234, Q.235, Q.236, Q.237, Q.238, Q.239, Q.240, Q.241, Q.242, Q.243, Q.244, Q.245, Q.246, Q.247, Q.248, Q.249, Q.250, Q.251, Q.252, Q.253, Q.254, Q.255, Q.256, Q.257, Q.258, Q.259, Q.260, Q.261, Q.262, Q.263, Q.264, Q.265, Q.266, Q.267, Q.268, Q.269, Q.270, Q.271, Q.272, Q.273, Q.274, Q.275, Q.276, Q.277, Q.278, Q.279, Q.280, Q.281, Q.282, Q.283, Q.284, Q.285, Q.286, Q.287, Q.288, Q.289, Q.290, Q.291, Q.292, Q.293, Q.294, Q.295, Q.296, Q.297, Q.298, Q.299, Q.300, Q.301, Q.302, Q.303, Q.304, Q.305, Q.306, Q.307, Q.308, Q.309, Q.310, Q.311, Q.312, Q.313, Q.314, Q.315, Q.316, Q.317, Q.318, Q.319, Q.320, Q.321, Q.322, Q.323, Q.324, Q.325, Q.326, Q.327, Q.328, Q.329, Q.330, Q.331, Q.332, Q.333, Q.334, Q.335, Q.336, Q.337, Q.338, Q.339, Q.340, Q.341, Q.342, Q.343, Q.344, Q.345, Q.346, Q.347, Q.348, Q.349, Q.350, Q.351, Q.352, Q.353, Q.354, Q.355, Q.356, Q.357, Q.358, Q.359, Q.360, Q.361, Q.362, Q.363, Q.364, Q.365, Q.366, Q.367, Q.368, Q.369, Q.370, Q.371, Q.372, Q.373, Q.374, Q.375, Q.376, Q.377, Q.378, Q.379, Q.380, Q.381, Q.382, Q.383, Q.384, Q.385, Q.386, Q.387, Q.388, Q.389, Q.390, Q.391, Q.392, Q.393, Q.394, Q.397, Q.398, Q.400, Q.401

Puccinia recondita f. sp. *tritici*/Wheat/Leaf Disc Curative (Brown Rust)

Wheat leaf segments cv. Kanzler are placed on agar in multiwell plates (24-well format). The leaf segments are inoculated with a spore suspension of the fungus. Plates were stored in darkness at 19° C. and 75% rh. The formulated test compound diluted in water was applied 1 day after inoculation. The leaf segments were incubated at 19° C. and 75% rh under a light regime of 12 h light/12 h darkness in a climate cabinet and the activity of a compound was assessed as percent disease control compared to untreated when an appropriate level of disease damage appears in untreated check leaf segments (6-8 days after application).

The following compounds gave at 200 ppm gave at least 50% disease control in this test when compared to untreated control leaf disks under the same conditions, which show extensive disease development:

Q.001, Q.004, Q.005, Q.006, Q.007, Q.010, Q.011, Q.012, Q.013, Q.014, Q.015, Q.016, Q.018, Q.019, Q.020, Q.021, Q.022, Q.023, Q.024, Q.025, Q.026, Q.027, Q.028, Q.029, Q.030, Q.031, Q.032, Q.033, Q.034, Q.035, Q.036, Q.037, Q.038, Q.039, Q.040, Q.041, Q.042, Q.043, Q.044, Q.045, Q.046, Q.047, Q.048, Q.049, Q.050, Q.051, Q.052, Q.053, Q.054, Q.055, Q.057, Q.058, Q.059, Q.060, Q.062, Q.063, Q.064, Q.065, Q.066, Q.067, Q.068, Q.069, Q.070, Q.071, Q.072, Q.073, Q.074, Q.075, Q.076, Q.077, Q.078, Q.079, Q.080, Q.081, Q.082, Q.084, Q.085, Q.086, Q.087, Q.088, Q.089, Q.090, Q.091, Q.092, Q.093, Q.094, Q.095, Q.096, Q.097, Q.098, Q.099, Q.100, Q.101, Q.102, Q.103, Q.104, Q.105, Q.106, Q.109, Q.110, Q.111, Q.112, Q.113, Q.114, Q.115, Q.116, Q.117, Q.118, Q.119, Q.120, Q.121, Q.122, Q.123, Q.124, Q.126, Q.127, Q.128, Q.129, Q.130, Q.131, Q.132, Q.133, Q.134, Q.135, Q.136, Q.140, Q.141, Q.143, Q.144, Q.145, Q.146, Q.147, Q.148, Q.149, Q.151, Q.152, Q.153, Q.154, Q.155, Q.156, Q.158, Q.159, Q.160, Q.161, Q.162, Q.163, Q.164, Q.165, Q.166, Q.167, Q.168, Q.169, Q.170, Q.171, Q.172, Q.174, Q.175, Q.176, Q.177, Q.178,

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Q.179, Q.180, Q.181, Q.182, Q.183, Q.184, Q.185, Q.186, Q.188, Q.191, Q.192, Q.193, Q.194, Q.195, Q.196, Q.197, Q.198, Q.199, Q.200, Q.201, Q.203, Q.204, Q.205, Q.206, Q.207, Q.208, Q.209, Q.211, Q.212, Q.213, Q.214, Q.215, Q.216, Q.217, Q.218, Q.219, Q.220, Q.221, Q.222, Q.223, Q.224, Q.225, Q.226, Q.227, Q.228, Q.229, Q.230, Q.231, Q.232, Q.233, Q.235, Q.236, Q.238, Q.239, Q.240, Q.241, Q.242, Q.243, Q.244, Q.246, Q.247, Q.248, Q.249, Q.250, Q.251, Q.253, Q.254, Q.255, Q.256, Q.257, Q.258, Q.260, Q.261, Q.262, Q.263, Q.265, Q.269, Q.270, Q.271, Q.273, Q.274, Q.275, Q.276, Q.277, Q.278, Q.279, Q.280, Q.281, Q.282, Q.283, Q.284, Q.285, Q.286, Q.287, Q.288, Q.289, Q.290, Q.291, Q.292, Q.293, Q.294, Q.296, Q.297, Q.298, Q.299, Q.300, Q.301, Q.302, Q.303, Q.304, Q.305, Q.306, Q.307, Q.308, Q.309, Q.310, Q.311, Q.315, Q.316, Q.317, Q.318, Q.319, Q.320, Q.321, Q.322, Q.323, Q.324, Q.325, Q.326, Q.327, Q.329, Q.330, Q.331, Q.332, Q.333, Q.334, Q.335, Q.336, Q.337, Q.338, Q.339, Q.340, Q.341, Q.342, Q.344, Q.345, Q.346, Q.347, Q.348, Q.349, Q.350, Q.351, Q.352, Q.353, Q.354, Q.355, Q.356, Q.357, Q.358, Q.359, Q.360, Q.361, Q.362, Q.363, Q.364, Q.365, Q.366, Q.367, Q.368, Q.369, Q.370, Q.371, Q.372, Q.373, Q.374, Q.375, Q.376, Q.377, Q.378, Q.380, Q.381, Q.382, Q.383, Q.384, Q.385, Q.386, Q.388, Q.389, Q.390, Q.391, Q.392, Q.393, Q.394, Q.397, Q.398, Q.400, Q.401

Pyrenophora teres/Barley/Leaf Disc Preventative (Net Blotch)

Barley leaf segments cv. Hasso were placed on agar in a multiwell plate (24-well format) and sprayed with the formulated test compound diluted in water. The leaf segments were inoculated with a spore suspension of the fungus 2 days after application. The inoculated leaf segments were incubated at 20° C. and 65% rh under a light regime of 12 h light/12 h darkness in a climate cabinet and the activity of a compound was assessed as disease control compared to untreated when an appropriate level of disease damage appears in untreated check leaf segments (5-7 days after application).

The following compounds gave at 200 ppm give at least 50% disease control in this test when compared to untreated control leaf disks under the same conditions, which show extensive disease development:

Q.001, Q.004, Q.005, Q.007, Q.011, Q.012, Q.013, Q.014, Q.015, Q.016, Q.018, Q.019, Q.020, Q.021, Q.022, Q.023, Q.024, Q.025, Q.026, Q.027, Q.028, Q.029, Q.032, Q.033, Q.034, Q.035, Q.038, Q.039, Q.041, Q.042, Q.043, Q.044, Q.046, Q.047, Q.052, Q.053, Q.054, Q.055, Q.057, Q.059, Q.062, Q.063, Q.066, Q.067, Q.069, Q.070, Q.071, Q.074, Q.075, Q.076, Q.079, Q.082, Q.086, Q.087, Q.088, Q.089, Q.090, Q.091, Q.093, Q.095, Q.097, Q.099, Q.100, Q.101, Q.102, Q.103, Q.105, Q.106, Q.110, Q.111, Q.113, Q.115, Q.116, Q.117, Q.118, Q.119, Q.120, Q.121, Q.122, Q.124, Q.125, Q.127, Q.128, Q.129, Q.131, Q.133, Q.136, Q.141, Q.143, Q.144, Q.146, Q.148, Q.153, Q.154, Q.155, Q.158, Q.160, Q.161, Q.162, Q.163, Q.164, Q.166, Q.167, Q.168, Q.169, Q.170, Q.174, Q.175, Q.176, Q.178, Q.180, Q.183, Q.184, Q.186, Q.191, Q.193, Q.195, Q.196, Q.197, Q.198, Q.199, Q.200, Q.201, Q.202, Q.203, Q.204, Q.206, Q.207, Q.208, Q.209, Q.211, Q.212, Q.214, Q.215, Q.216, Q.217, Q.218, Q.219, Q.220, Q.221, Q.222, Q.223, Q.224, Q.225, Q.226, Q.227, Q.228, Q.229, Q.231, Q.232, Q.233, Q.235, Q.236, Q.237, Q.238, Q.240, Q.241, Q.242, Q.243, Q.244, Q.245, Q.246, Q.247, Q.248, Q.249, Q.250, Q.251, Q.252, Q.253, Q.255, Q.256, Q.260, Q.261, Q.262, Q.269, Q.275, Q.277, Q.278, Q.280, Q.282, Q.284, Q.285, Q.286, Q.289, Q.291, Q.292, Q.293, Q.298, Q.299, Q.301, Q.302, Q.304, Q.308, Q.311, Q.315, Q.316, Q.320, Q.322, Q.324, Q.326, Q.329, Q.334, Q.335, Q.336, Q.337, Q.340, Q.344, Q.346, Q.349, Q.352, Q.353, Q.354, Q.355, Q.357, Q.358, Q.361,

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Q.363, Q.364, Q.366, Q.370, Q.371, Q.375, Q.376, Q.377, Q.378, Q.380, Q.382, Q.386, Q.389, Q.390, Q.391, Q.392, Q.393, Q.394, Q.398, Q.400

In the following Tables 'Activity (%)' means the assessed experimental activity (% disease control in this test when compared to untreated control leaf disks under the same conditions, which show extensive disease development) and "P" is the expected value calculated (expected) activity according to the COLBY formula (see above). The column headed 'S?' indicates whether or not synergy was observed, with 'y' meaning that synergy was observed.

In the following tables, compound (V) is N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, compound (VI) is 3-(difluoromethyl)-N-methoxy-1-methyl-N-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1H-pyrazole-4-carboxamide, compound (VII) is [3-(4-chloro-2-fluorophenyl)-5-(2,4-difluoro-phenyl)-isoxazol-4-yl]-pyridin-3-yl-methanol.

Monographella nivalis (syn. *Microdochium nivale*, *Fusarium nivale*), snow mould, foot rot of cereals

Conidia of the fungus from cryogenic storage were directly mixed into nutrient broth (PDB potato dextrose broth). After placing a (DMSO) solution of the test compounds into a microtiter plate (96-well format) the nutrient broth containing the fungal spores was added. The test plates were incubated at 24° C. and activity was determined visually after 72 hrs

Q.135 rate ppm	Compound (V) rate ppm	Activity (%)	P	S?
0.0625		20		
0.03125		0		
0.015625		0		
0.0078125		0		
	0.0625	50		
	0.03125	0		
0.0625	0.03125	50	20	y
0.03125	0.03125	50	0	y
0.03125	0.0625	70	50	y
0.015625	0.03125	20	0	y
0.015625	0.0625	70	50	y
0.0078125	0.03125	70	0	y

Q.135 rate ppm	Metconazole rate ppm	Activity (%)	P	S?
0.0625		70		
0.03125		0		
	0.25	0		
	0.125	0		
	0.0625	0		
	0.03125	0		
	0.015625	0		
0.0625	0.25	100	70	y
0.0625	0.125	100	70	y
0.0625	0.0625	100	70	y
0.0625	0.03125	100	70	y
0.0625	0.015625	100	70	y
0.03125	0.125	100	0	y
0.03125	0.0625	70	0	y
0.03125	0.03125	50	0	y
0.03125	0.015625	20	0	y

Q.135 rate ppm	cis-Jasmone rate ppm	Activity (%)	P	S?
0.0625		50		
0.03125		0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.15625	0		

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0.0625	1.25	100	50	y
0.0625	0.625	90	50	y
0.0625	0.3125	100	50	y
0.0625	0.15625	100	50	y
0.03125	1.25	100	0	y
0.03125	0.625	50	0	y
0.03125	0.3125	20	0	y

Q.135 rate ppm	2,4-D rate ppm	Activity (%)	P	S?
0.625		50		
0.3125		0		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
0.625	2.5	100	50	y
0.625	1.25	90	50	y
0.625	0.625	90	50	y
0.625	0.3125	90	50	y
0.625	0.15625	100	50	y
0.3125	1.25	20	0	y

Q.135 rate ppm	Azoxystrobin rate ppm	Activity (%)	P	S?
0.125		70		
0.0625		0		
	0.00625	70		
	0.003125	20		
	0.0015625	0		
0.125	0.003125	90	70	y
0.0625	0.00625	100	70	y
0.0625	0.0015625	20	0	y

Q.135 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?
0.03125		20		
	0.125	0		
	0.0625	0		
	0.03125	0		
	0.015625	0		
	0.0078125	0		
0.03125	0.125	100	20	y
0.03125	0.0625	90	20	y
0.03125	0.03125	90	20	y
0.03125	0.015625	70	20	y
0.03125	0.0078125	90	20	y

Q.135 rate ppm	Bicyclopyrone rate ppm	Activity (%)	P	S?
0.0625		20		
0.03125		0		
	0.3125	0		
	0.15625	0		
	0.078125	0		
0.0625	0.15625	90	20	y
0.03125	0.078125	20	0	y
0.0625	0.3125	70	20	y

Q.135 rate ppm	Abamectin rate ppm	Activity (%)	P	S?
0.0625		20		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.15625	0		
0.0625	0.15625	70	20	y
0.0625	0.3125	50	20	y
0.0625	0.625	20	20	y
0.0625	1.25	50	20	y
0.0625	2.5	100	20	y

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Q.135 rate ppm	Thiamethoxam rate ppm	Activity (%)	P	S?
0.125		70		
0.0625		20		
	5	0		
	2.5	0		
	0.625	0		
	0.3125	0		
0.125	0.3125	100	70	y
0.125	0.625	90	70	y
0.0625	0.3125	50	20	y
0.125	0.25	90	70	y
0.125	0.5	100	70	y
0.0625	0.25	70	20	y
Q.135 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?
0.0625		70		
0.03125		0		
	0.25	0		
	0.125	0		
	0.0625	0		
	0.03125	0		
	0.015625	0		
0.0625	0.015625	90	70	y
0.0625	0.03125	100	70	y
0.0625	0.0625	100	70	y
0.03125	0.015625	50	0	y
0.03125	0.03125	20	0	y
0.0625	0.125	100	70	y
0.03125	0.0625	50	0	y
0.0625	0.25	100	70	y
0.03125	0.125	70	0	y
Q.135 rate ppm	Glufosinate rate ppm	Activity (%)	P	S?
0.0625		70		
0.03125		0		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
0.0625	0.3125	90	70	y
0.0625	0.625	70	70	
0.0625	1.25	90	70	y
0.03125	0.625	20	0	y
0.0625	2.5	90	70	y
0.03125	1.25	20	0	y
Q.135 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?
0.0625		70		
	0.25	0		
	0.125	0		
	0.0625	0		
	0.03125	0		
0.0625	0.25	100	70	y
0.0625	0.125	90	70	y
0.0625	0.0625	90	70	y
0.0625	0.03125	90	70	y
Q.135 rate ppm	Trinexapacethyl rate ppm	Activity (%)	P	S?
0.0625		50		
0.03125		0		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.12625	0		
0.0625	2.5	100	50	y
0.0625	1.25	90	50	y
0.0625	0.625	70	50	y
0.0625	0.3125	90	50	y

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0.0625	0.15625	90	50	y
0.03125	1.25	20	0	y
Q.135 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?
0.0625		70		
0.03125		0		
0.015625		0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.15625	0		
0.0625	1.25	100	70	y
0.0625	0.625	100	70	y
0.0625	0.3125	100	70	y
0.0625	0.15625	100	70	y
0.03125	1.25	100	0	y
0.03125	0.625	100	0	y
0.03125	0.3125	50	0	y
0.03125	0.15625	20	0	y
0.015625	0.625	20	0	y
Q.135 rate ppm	Pyraclostrobin rate ppm	Activity (%)	P	S?
0.125		70		
0.0625		0		
	0.003125	0		
	0.0015625	0		
0.125	0.003125	90	70	y
0.0625	0.003125	20	0	y
0.0625	0.0015625	20	0	y
Q.135 rate ppm	Mandipropamid rate ppm	Activity (%)	P	S?
0.125		70		
0.0625		20		
0.03125		0		
	0.0625	0		
	0.03125	0		
0.125	0.0625	90	70	y
0.125	0.03125	90	70	y
0.0625	0.0625	20	20	
0.03125	0.0625	50	0	y
Q.135 rate ppm	Carbendazim rate ppm	Activity (%)	P	S?
0.125		70		
0.0625		20		
0.03125		0		
	0.0625	0		
	0.03125	0		
0.125	0.0625	90	70	y
0.125	0.03125	90	70	y
0.0625	0.0625	20	20	
0.03125	0.0625	50	0	y
Q.135 rate ppm	Copper hydroxide rate ppm	Activity (%)	P	S?
0.125		70		
0.0625		20		
	0.0625	0		
	0.03125	0		
	0.015625	0		
0.125	0.0625	90	70	y
0.0625	0.03125	50	20	y
0.0625	0.015625	50	20	y
0.125		70		
0.0625		20		
	5	0		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.15625	0		
0.125	0.3125	100	70	y
0.125	0.625	100	70	y
0.125	1.25	100	70	y
0.0625	0.15625	70	20	y
0.0625	0.3125	70	20	y
0.125	2.5	100	70	y
0.125	5	100	70	y

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Q.135 rate ppm	Manganese oxide rate ppm	Activity (%)	P	S?
0.0625		20		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.15625	0		
0.0625	0.15625	70	20	y
0.0625	0.3125	50	20	y
0.0625	0.625	20	20	
0.0625	1.25	70	20	y
0.0625	2.5	90	20	y
Q.135 rate ppm	Mesotrione rate ppm	Activity (%)	P	S?
0.0625		20		
0.03125		0		
	2.5	0		
	1.25	0		
	0.625	0		
	0.3125	0		
	0.15625	0		
	0.078125	0		
0.0625	0.15625	70	20	y
0.0625	0.3125	70	20	y
0.0625	0.625	50	20	y
0.03125	0.078125	20	0	y
0.03125	0.15625	20	0	y
0.03125	0.3125	0	0	y
0.0625	1.25	70	20	y
0.03125	0.625	20	0	y
0.0625	2.5	90	20	y
0.03125	1.25	20	0	y
Q.135 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?
0.0625		70		
0.03125		0		
	0.0125	0		
	0.00625	0		
	0.003125	0		
	0.0015625	0		
0.0625	0.0015625	100	70	y
0.0625	0.003125	100	70	y
0.0625	0.00625	100	70	y
0.03125	0.0015625	20	0	y
0.03125	0.003125	20	0	y
0.0625	0.0125	100	70	y
0.03125	0.00625	100	0	y
0.03125	0.0125	100	0	y
Q.113 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?
2		70		
1		20		
0.5		20		
0.25		0		
	2	0		
	1	0		
	0.5	0		
	0.25	0		
2	2	100	70	y
2	1	100	70	y
2	0.5	90	70	y
1	2	90	20	y
1	1	70	20	y
1	0.5	70	20	y
1	0.25	50	20	y
0.5	2	50	20	y
0.25	1	20	0	y

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Q.113 rate ppm	Metconazole rate ppm	Activity (%)	P	S?
1		50		
0.5		20		
0.25		0		
0.125		0		
	1	20		
	0.5	0		
	0.25	0		
	0.125	0		
1	1	100	60	y
1	0.5	100	50	y
1	0.25	100	50	y
0.5	1	100	36	y
0.5	0.5	100	20	y
0.5	0.25	90	20	y
0.5	0.125	50	20	y
0.25	1	100	20	y
0.25	0.5	70	0	y
0.25	0.25	50	0	y
0.25	0.125	20	0	y
0.125	0.5	50	0	y
0.125	0.25	20	0	y
0.125	0.125	20	0	y
Q.113 rate ppm	Penflufen rate ppm	Activity (%)	P	S?
1		20		
0.5		2		
0.25		2		
0.125		2		
	1	20		
	0.5	0		
1	1	50	36	y
0.5	1	50	20	y
0.5	0.5	20	0	y
0.25	1	50	20	y
0.25	0.5	20	0	y
0.125	0.5	20	0	y
Q.113 rate ppm	Bixafen rate ppm	Activity (%)	P	S?
0.25		0		
0.125		0		
0.0625		0		
	0.25	20		
0.25	0.25	50	20	y
0.125	0.25	50	20	y
0.0625	0.25	50	20	y
Q.113 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?
0.5		20		
0.25		0		
	1	20		
	0.5	0		
	0.25	0		
	0.125	0		
	0.0625	0		
0.5	1	700	36	y
0.5	0.5	100	20	y
0.5	0.25	100	20	y
0.5	0.125	100	20	y
0.25	1	100	20	y
0.25	0.5	90	0	y
0.25	0.25	70	0	y
0.25	0.125	20	0	y
0.25	0.0625	20	0	y
Q.113 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?
0.5		0		
0.25		0		

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0.125		0			
	0.0125	0			
0.5	0.0125	90	0	y	
0.25	0.0125	50	0	y	
0.125	0.0125	20	0	y	
Q.113 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?	
2		70			
1		20			
0.5		0			
0.25		0			
	1	20			
	0.5	0			
	0.25	0			
	0.125	0			
2	0.5	100	70	y	
2	1	100	76	y	
1	0.25	90	20	y	
1	0.5	100	20	y	
1	1	100	36	y	
0.5	0.125	20	0	y	
0.5	0.25	50	0	y	
0.5	0.5	90	0	y	
0.25	0.125	20	0	y	
0.25	0.25	20	0	y	
0.5	1	100	20	y	
0.25	0.5	50	0	y	
0.25	1	90	20	y	
Q.113 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?	
1		50			
0.5		20			
0.25		0			
0.125		0			
	10	0			
	5	0			
	2.5	0			
	1.25	0			
1	10	100	50	y	
1	5	100	50	y	
1	2.5	90	50	y	
0.5	10	70	20	y	
0.5	5	70	20	y	
0.5	2.5	50	20	y	
0.5	1.25	50	20	y	
0.25	10	50	0	y	
0.25	5	50	0	y	
0.25	2.5	50	0	y	
0.25	1.25	20	0	y	
0.125	5	20	0	y	
0.125	2.5	20	0	y	
Q.113 rate ppm	Azoxystrobin rate ppm	Activity (%)	P	S?	
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.00625	50			
0.25	0.00625	70	50	y	
0.125	0.00625	70	50	y	
0.0625	0.00625	50	50		
0.03125	0.00625	100	50	y	
Q.113 rate ppm	Cyprodinil rate ppm	Activity (%)	P	S?	
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.003125	20			
	0.0015625	0			
0.015625	0.003125	50	20	y	
0.0078125	0.0015625	20	0	y	

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0.0078125	0.003125	50	20	y	
0.00390625	0.0015625	20	0	y	
Q.113 rate ppm	Abamectin rate ppm	Activity (%)	P	S?	
2		70			
1		20			
0.5		0			
	20	50			
	10	0			
	5	0			
2	10	100	70	y	
1	5	50	20	y	
2	20	100	85	y	
1	10	50	20	y	
1	20	100	60	y	
0.5	10	20	0	y	
0.5	20	70	50	y	
Q.113 rate ppm	Mesotrione rate ppm	Activity (%)	P	S?	
1		20			
0.5		0			
	5	0			
	2.5	0			
1	2.5	50	20	y	
1	5	50	20	y	
0.5	2.5	20	0	y	
Q.062 rate ppm	Compound (V) rate ppm	Activity (%)	P	S?	
0.0625		0			
0.03125		0			
0.015625		0			
	0.125	70			
	0.0625	50			
	0.03125	0			
0.0625	0.125	100	70	y	
0.03125	0.0625	70	50	y	
0.015625	0.03125	20	0	y	
0.03125	0.125	90	70	y	
0.015625	0.0625	70	50	y	
Q.062 rate ppm	Compound (VI) rate ppm	Activity (%)	P	S?	
0.03125		0			
0.015625		0			
	0.125	50			
	0.0625	0			
0.03125	0.125	70	50	y	
0.03125	0.0625	20	0	y	
0.015625	0.0625	20	0	y	
Q.062 rate ppm	Chlorothalonil rate ppm	Activity (%)	P	S?	
0.5		50			
0.25		20			
0.125		0			
	0.125	70			
	0.0625	20			
	0.03125	0			
0.25	0.0625	50	36	y	
0.5	0.125	100	85	y	
0.125	0.0625	50	20	y	
0.125	0.03125	20	0	y	
Q.062 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?	
0.5		50			
0.25		20			

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0.125	0			
0.5	0			
0.25	0			
0.125	0			
0.0625	0			
0.5	0.5	90	50	y
0.5	0.25	90	50	y
0.5	0.125	90	50	y
0.25	0.5	50	20	y
0.25	0.25	50	20	y
0.25	0.125	50	20	y
0.25	0.0625	50	20	y
0.125	0.5	20	0	y
0.125	0.25	20	0	y
0.125	0.125	20	0	y
0.125	0.0625	20	0	y
Q.062 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?
0.5		70		
0.25		20		
0.125		0		
	10	0		
	5	0		
	2.5	0		
	1.25	0		
	0.625	0		
0.5	10	100	70	y
0.5	5	100	70	y
0.5	2.5	100	70	y
0.5	1.25	100	70	y
0.25	10	100	20	y
0.25	5	100	20	y
0.25	2.5	90	20	y
0.25	1.25	70	20	y
0.25	0.625	70	20	y
0.125	5	70	0	y
0.125	2.5	70	0	y
0.125	1.25	50	0	y
0.125	0.625	20	0	y
Q.062 rate ppm	cis- Jasmone rate ppm	Activity (%)	P	S?
0.25		20		
0.125		0		
	5	0		
	2.5	0		
	1.25	0		
	0.625	0		
0.25	5	50	20	y
0.25	2.5	50	20	y
0.25	1.25	50	20	y
0.25	0.625	50	20	y
0.125	5	50	0	y
0.125	2.5	50	0	y
0.125	1.25	50	0	y
Q.062 rate ppm	Penflufen rate ppm	Activity (%)	P	S?
2		20		
1		0		
0.5		0		
0.25		0		
	1	20		
	0.5	0		
2	1	50	36	y
1	0.5	20	0	y
0.5	1	50	20	y
0.25	0.5	20	0	y

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Q.062 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?
2		20		
1		0		
	2	20		
	1	0		
	0.5	0		
	0.25	0		
2	2	100	36	y
2	1	90	20	y
2	0.5	70	20	y
1	2	70	20	y
1	1	50	0	y
1	0.5	20	0	y
1	0.25	20	0	y
Q.062 rate ppm	Abamectin rate ppm	Activity (%)	P	S?
1		70		
0.5		50		
	20	50		
	10	0		
	5	0		
1	5	90	70	y
1	10	100	70	y
1	20	100	85	y
0.5	10	70	50	y
0.5	20	100	75	y
Q.062 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?
0.5		50		
0.25		20		
0.125		0		
0.0625		0		
	1	20		
	0.5	0		
	0.25	0		
	0.125	0		
	0.0625	0		
0.5	0.125	70	50	y
0.5	0.25	100	50	y
0.5	0.5	100	50	y
0.25	0.125	50	20	y
0.25	0.25	70	20	y
0.5	1	100	60	y
0.125	0.0625	20	0	y
0.125	0.125	20	0	y
0.25	0.5	100	20	y
0.125	0.25	50	0	y
0.0625	0.125	20	0	y
0.25	1	100	36	y
0.125	0.5	70	0	y
0.0625	0.25	20	0	y
Q.062 rate ppm	Metconazole rate ppm	Activity (%)	P	S?
0.5		50		
0.25		20		
0.125		0		
0.0625		0		
	1	20		
	0.5	0		
	0.25	0		
	0.125	0		
	0.0625	0		
0.5	1	100	60	y
0.5	0.5	100	50	y
0.5	0.25	70	50	y
0.5	0.125	100	50	y
0.25	1	100	36	y
0.25	0.5	100	20	y
0.25	0.25	90	20	y
0.25	0.125	20	20	
0.25	0.0625	50	20	y

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0.125	0.5	90	0	y	5
0.125	0.25	50	0	y	
0.125	0.125	20	0	y	
0.0625	0.25	20	0	y	
Q.062 rate ppm	Trinexapacethyl rate ppm	Activity (%)	P	S?	
0.5		70			10
0.25		20			
0.125		0			
	5	0			
	2.5	0			15
	1.25	0			
	0.625	0			
0.5	5	90	70	y	
0.5	2.5	90	70	y	20
0.5	1.25	90	70	y	
0.25	5	50	20	y	
0.25	1.25	50	20	y	
0.25	0.625	50	20	y	25
0.125	5	20	0	y	
0.125	2.5	20	0	y	
Q.062 rate ppm	2,4-D rate ppm	Activity (%)	P	S?	
0.5		70			30
0.25		20			
0.125		0			
	10	0			
	5	0			35
	2.5	0			
	1.25	0			
	0.625	0			
0.5	10	90	70	y	40
0.5	5	90	70	y	
0.5	2.5	90	70	y	
0.5	1.25	90	70	y	
0.25	10	50	20	y	45
0.25	5	50	20	y	
0.25	2.5	50	20	y	
0.25	1.25	50	20	y	
0.25	0.625	50	20	y	50
0.125	5	20	0	y	
0.125	2.5	20	0	y	
0.125	1.25	20	0	y	
Q.062 rate ppm	Pyraclostrobin rate ppm	Activity (%)	P	S?	
0.0625		0			55
0.03125		0			
0.015625		0			
	0.0125	50			
	0.00625	0			60
0.0625	0.0125	70	50	y	
0.03125	0.0125	70	50	y	
0.03125	0.00625	20	0	y	
0.015625	0.00625	20	0	y	65
Q.062 rate ppm	Mesotrione rate ppm	Activity (%)	P	S?	
1		70			
	20	0			
	10	0			70
	5	0			
1	5	90	70	y	
1	10	90	70	y	
1	20	90	70	y	75
Q.062 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?	
0.5		50			
0.25		20			
0.125		0			

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0.0625		0			5	
	0.0125	0				
0.5	0.0125	100	50	y		
0.25	0.0125	100	20	y		
0.125	0.0125	50	0	y		
0.0625	0.0125	20	0	y		
Q.062 rate ppm	Glufosinate rate ppm	Activity (%)	P	S?		
0.125		0			15	
	5	0				
	2.5	0				
	1.25	0				
0.125	1.25	20	0	y	20	
0.125	2.5	20	0	y		
0.125	5	20	0	y		
<i>Botrytis cinerea</i> (Gray mould)						
Conidia of the fungus from cryogenic storage were directly mixed into nutrient broth (PDB potato dextrose broth). After placing a (DMSO) solution of the test compounds into a microtiter plate (96-well format) the nutrient broth containing the fungal spores was added. The test plates were incubated at 24° C. and the activity was determined visually after 72 hrs.						
Q.135 rate ppm	Fluxapyroxad rate ppm	Activity (%)	P	S?		
0.03125		0			30	
0.015625		0				
0.0078125		0				
0.00390625		0				
	0.0625	50			35	
	0.03125	20				
	0.015625	20				
	0.0078125	0				
0.03125	0.0625	70	50	y	40	
0.015625	0.03125	50	20	y		
0.0078125	0.015625	50	20	y		
0.00390625	0.0078125	20	0	y		
0.015625	0.0625	70	50	y	45	
0.0078125	0.03125	50	20	y		
0.00390625	0.015625	50	20	y		
Q.135 rate ppm	Compound (V) rate ppm	Activity (%)	P	S?		
0.03125		0			50	
0.015625		0				
0.0078125		0				
	0.125	70				
	0.0625	70			55	
	0.03125	50				
	0.015625	20				
0.015625	0.03125	70	50	y		
0.0078125	0.015625	50	20	y	60	
0.03125	0.125	90	70	y		
0.015625	0.0625	70	70	y		
0.0078125	0.03125	70	50	y		
Q.135 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?		
1		50			65	
0.5		20				
0.25		0				
0.125		0				
	1	0			70	
	0.5	0				
	0.25	0				
	0.125	0				
1	1	100	50	y	75	
1	0.5	100	50	y		

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1	0.25	100	50	y	
0.5	1	90	20	y	
0.5	0.5	90	20	y	
0.5	0.25	90	20	y	5
0.5	0.125	70	20	y	
0.25	1	70	0	y	
0.25	0.5	50	0	y	
0.25	0.25	50	0	y	
0.25	0.125	50	0	y	
0.125	0.5	20	0	y	10
Q.135 rate ppm	Metconazole rate ppm	Activity (%)	P	S?	
0.125		0			
0.0625		0			
0.03125		0			15
	0.03125	0			
	0.015625	0			
0.125	0.03125	70	0	y	
0.0625	0.03125	50	0	y	
0.0625	0.015625	20	0	y	20
0.03125	0.03125	50	0	y	
Q.135 rate ppm	cis- Jasmone rate ppm	Activity (%)	P	S?	
1		50			25
0.5		20			
0.25		0			
	5	0			
	2.5	0			
	1.25	0			
	0.625	0			30
1	5	90	50	y	
1	2.5	90	50	y	
0.5	2.5	50	20	y	
0.5	1.25	50	20	y	
0.25	1.25	20	0	y	
0.25	0.625	20	0	y	35
Q.135 rate ppm	2,4-D rate ppm	Activity (%)	P	S?	
1		50			
0.5		20			
	10	0			40
	5	0			
	2.5	0			
1	10	90	50	y	
1	5	100	50	y	
1	2.5	90	50	y	45
0.5	10	50	20	y	
0.5	5	50	20	y	
0.5	2.5	50	20	y	
0.5	1.25	50	20	y	
Q.135 rate ppm	Pyraclostrobin rate ppm	Activity (%)	P	S?	
1		20			50
0.5		0			
0.25		0			
	0.2	20			
	0.1	0			
	0.05	0			
	0.025	0			
1	0.2	70	36	y	
1	0.1	50	20	y	
1	0.05	50	20	y	
1	0.025	50	20	y	60
0.5	0.2	50	20	y	
0.5	0.1	50	0	y	
0.5	0.05	20	0	y	
0.5	0.025	20	0	y	
0.25	0.1	20	0	y	
0.25	0.05	20	0	y	65

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Q.135 rate ppm	Picoxystrobin rate ppm	Activity (%)	P	S?
1		20		
0.5		0		
0.25		0		
0.125		0		
	2	50		
	1	50		
	0.5	50		
	0.25	50		
1	2	90	60	y
1	1	90	60	y
1	0.5	90	60	y
0.5	2	90	50	y
0.5	1	70	50	y
0.5	0.5	70	50	y
0.5	0.25	70	50	y
0.25	1	70	50	y
0.25	0.58	70	50	y
0.25	0.25	70	50	y
0.125	0.5	70	50	y
0.125	0.25	70	50	y
Q.135 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?
1		50		
0.5		20		
0.25		0		
0.125		0		
0.0625		0		
	0.25	0		
	0.125	0		
	0.0625	0		
1	0.25	100	50	y
0.5	0.25	100	20	y
0.5	0.125	100	20	y
0.25	0.25	100	0	y
0.25	0.125	100	0	y
0.25	0.0625	90	0	y
0.125	0.25	100	0	y
0.125	0.125	100	0	y
0.125	0.0625	70	0	y
0.0625	0.25	90	0	y
0.0625	0.125	70	0	y
0.0625	0.0625	20	0	y
Q.135 rate ppm	Bicycloporyne rate ppm	Activity (%)	P	S?
1		50		
0.5		20		
	5	0		
	2.5	0		
	1.25	0		
1	2.5	70	50	y
1	5	70	50	y
0.5	1.25	50	20	y
0.5	2.5	50	20	y
Q.135 rate ppm	Thiamethoxam rate ppm	Activity (%)	P	S?
1		50		
0.5		20		
0.25		0		
	2.5	0		
	1.25	0		
	0.625	0		
1	2.5	70	50	y
0.5	1.25	50	20	y
0.25	0.625	20	0	y
Q.135 rate ppm	Mesotrione rate ppm	Activity (%)	P	S?
1		50		
0.5		20		

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0.25		0			
	10	0			
	5	0			
	2.5	0			
	1.25	0			
	0.625	0			
1	2.5	70	50	y	
1	5	70	50	y	
0.5	1.25	50	20	y	
0.5	2.5	50	20	y	
0.25	0.625	20	0	y	
0.25	1.25	20	0	y	
0.5	10	50	20	y	
Q.135 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?	
2		70			
1		50			
0.5		20			
0.25		0			
0.125		0			
	0.5	50			
	0.25	0			
	0.125	0			
	0.0625	0			
2	0.5	100	85	y	
1	0.25	100	20	y	
1	0.5	100	60	y	
0.5	0.125	70	20	y	
0.5	0.25	90	20	y	
0.5	0.5	100	60	y	
0.25	0.0625	50	0	y	
0.25	0.125	70	0	y	
0.25	0.25	70	0	y	
0.125	0.0625	20	0	y	
0.125	0.125	20	0	y	
0.25	0.5	90	50	y	
0.125	0.25	50	0	y	
0.125	0.5	70	50	y	
Q.135 rate ppm	Mandipropamid rate ppm	Activity (%)	P	S?	
2		70			
1		20			
0.5		0			
	20	0			
	10	0			
	5	0			
2	10	90	70	y	
2	20	90	70	y	
1	5	50	20	y	
1	10	50	20	y	
0.5	5	20	0	y	
1	20	50	20	y	
0.5	10	20	0	y	
0.5	20	20	0	y	
Q.135 rate ppm	Chlorotalonil rate ppm	Activity (%)	P	S?	
0.5		20			
0.25		0			
0.125		0			
0.0625		0			
	0.25	20			
	0.125	0			
	0.0625	0			
0.5	0.25	90	36	y	
0.5	0.125	50	20	y	
0.25	0.25	90	20	y	
0.25	0.125	50	0	y	
0.25	0.0625	20	0	y	
0.125	0.25	50	20	y	
0.125	0.125	50	0	y	
0.125	0.0625	20	0	y	
0.0625	0.25	50	20	y	

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0.0625	0.125	20	0	y	
0.0625	0.0625	20	0	y	
Q.135 rate ppm	Trinexapacethyl rate ppm	Activity (%)	P	S?	
1		50			
0.5		20			
0.25		0			
	20	0			
	10	0			
	5	0			
	2.5	0			
	1.25	0			
1	20	90	50	y	
1	10	90	50	y	
1	5	90	50	y	
1	2.5	90	50	y	
0.5	20	70	20	y	
0.5	10	50	20	y	
0	5	50	20	y	
0.5	2.5	50	20	y	
0.5	1.25	50	20	y	
0.25	10	20	0	y	
0.25	5	20	0	y	
0.25	1.25	20	0	y	
Q.135 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?	
0.5		20			
0.25		0			
0.125		0			
0.0625		0			
	2.5	0			
	1.25	0			
	0.625	0			
0.5	2.5	100	20	y	
0.5	1.25	100	20	y	
0.25	2.5	100	0	y	
0.25	1.25	90	0	y	
0.25	0.625	70	0	y	
0.125	2.5	100	0	y	
0.125	1.25	70	0	y	
0.125	0.625	50	0	y	
0.0625	2.5	100	0	y	
0.0625	1.25	50	0	y	
Q.135 rate ppm	Azoxystrobin rate ppm	Activity (%)	P	S?	
2		50			
1		20			
0.5		0			
0.25		0			
	0.2	20			
	0.1	0			
	0.05	0			
	0.025	0			
2	0.1	90	50	y	
2	0.05	70	50	y	
1	0.2	70	36	y	
1	0.1	50	20	y	
1	0.05	50	20	y	
1	0.025	50	20	y	
0.5	0.2	50	20	y	
0.5	0.1	50	0	y	
0.5	0.05	20	0	y	
0.5	0.025	20	0	y	
0.25	0.1	50	0	y	
0.25	0.05	20	0	y	
0.25	0.025	20	0	y	
65	0.25	20	0	y	

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Q.135 rate ppm	Trifloxystrobin rate ppm	Activity (%)	P	S?
0.5		20		
0.25		0		
	0.1	50		
	0.05	50		
	0.025	20		
	0.0125	0		
0.5	0.025	50	36	y
0.5	0.0125	50	20	y
0.25	0.1	70	50	y
0.25	0.05	50	50	
0.25	0.025	50	20	y
0.25	0.0125	20	0	y
Q.135 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?
0.25		0		
0.125		0		
0.0625		0		
0.03125		0		
	0.0625	70		
	0.03125	0		
0.25	0.0625	100	70	y
0.125	0.0625	100	70	y
0.125	0.03125	50	0	y
0.0625	0.0625	100	70	y
0.0625	0.03125	50	0	y
0.03125	0.0625	100	70	y
0.03125	0.03125	50	0	y
Q.135 rate ppm	Copper hydroxide rate ppm	Activity (%)	P	S?
1		50		
0.5		20		
	5	0		
	2.5	0		
	1.25	0		
1	2.5	70	50	y
1	5	70	50	y
0.5	1.25	50	20	y
0.5	2.5	50	20	y
Q.135 rate ppm	Abamectin rate ppm	Activity (%)	P	S?
1		50		
0.5		20		
0.25		0		
	20	0		
	10	0		
	5	0		
	2.5	0		
	1.25	0		
1	2.5	90	50	y
1	5	90	50	y
1	10	70	50	y
0.5	1.25	50	20	y
0.5	2.5	70	20	y
0.5	5	50	20	y
1	20	70	50	y
0.25	1.25	20	0	y
0.25	2.5	20	0	y
0.5	10	50	20	y
0.25	5	50	0	y
0.5	20	50	20	y
0.25	10	50	0	y
Q.135 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?
0.5		20		
0.25		0		

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0.125		0		
	0.05	50		
	0.025	0		
	0.0125	0		
	0.00625	0		
2	0.05	100	85	y
1	0.025	100	20	y
1	0.05	100	60	y
0.5	0.0125	90	20	y
0.5	0.025	100	20	y
0.5	0.05	100	60	y
0.25	0.00625	50	0	y
0.25	0.0125	70	0	y
0.25	0.025	90	0	y
0.125	0.00625	20	0	y
0.125	0.0125	50	0	y
0.125	0.05	100	50	y
0.125	0.025	70	0	y
0.125	0.05	100	50	y
Q.135 rate ppm	Glufosinate rate ppm	Activity (%)	P	S?
1		20		
0.5		0		
0.25		0		
	20	0		
	10	0		
	5	0		
	2.5	0		
1	2.5	50	20	y
1	5	50	20	y
0.5	2.5	20	0	y
1	20	50	20	y
0.5	10	20	0	y
0.5	20	20	0	y
0.5	10	20	0	y
Q.135 rate ppm	Procymidone rate ppm	Activity (%)	P	S?
1		20		
0.5		0		
0.25		0		
	2.5	50		
	1.25	0		
1	2.5	100	60	y
0.5	1.25	50	0	y
0.25	2.5	90	50	y
Q.113 rate ppm	Fluxapyroxad rate ppm	Activity (%)	P	S?
0.03125		0		
0.015625		0		
0.0078125		0		
0.00390625		0		
	0.0625	50		
	0.03125	50		
	0.015625	20		
	0.0078125	20		
0.03125	0.0625	70	50	y
0.015625	0.03125	70	50	y
0.0078125	0.015625	50	20	y
0.00390625	0.0078125	20	20	
0.015625	0.0625	70	50	y
0.0078125	0.03125	70	50	y
0.00390625	0.015625	50	20	y
Q.113 rate ppm	Pyraclostrobin rate ppm	Activity (%)	P	S?
2		0		
1		0		
0.5		0		
	2	70		
	0.25	50		
2	2	90	70	y
1	2	90	70	y

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1	0.25	70	50	y	
0.5	2	90	70	y	
Q.113 rate ppm	Chlorotalonil rate ppm	Activity (%)	P	S?	
1		0			
0.5		0			
0.25		0			
1	0.25	50	20	y	
0.5	0.25	70	20	y	
0.25	0.25	70	20	y	
Q.113 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?	
2		0			
1		0			
	2	0			
	1	0			
2	2	50	0	y	
2	1	20	0	y	
1	2	20	0	y	
Q.113 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?	
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.0625	70			
	0.03125	0			
0.25	0.03125	70	70		
0.125	0.0625	20	0	y	
0.125	0.03125	90	70	y	
0.0625	0.0625	90	70	y	
0.0625	0.03125	20	0	y	
0.03125	0.0625	20	0	y	
Q.113 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
0.25		0			
0.125		0			
	0.5	70			
	0.25	0			
	0.125	0			
2	0.5	100	70	y	
1	0.5	100	70	y	
1	0.25	100	0	y	
0.5	0.5	100	70	y	
0.5	0.25	70	0	y	
0.5	0.125	20	0	y	
0.25	0.5	100	70	y	
0.25	0.25	70	0	y	
0.125	0.5	90	70	y	
0.125	0.25	20	0	y	
Q.113 rate ppm	Compound (VI) rate ppm	Activity (%)	P	S?	
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
0.015625		0			
0.0078125		0			
	0.0625	70			
	0.03125	70			
	0.015625	50			
	0.0078125	20			
0.25	0.0625	90	70	y	
0.125	0.0625	90	70	y	

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0.0625	0.0625	90	70	y	
0.03125	0.0625	90	70	y	
0.015625	0.0625	90	70	y	
0.015625	0.015625	70	50	y	
0.015625	0.03125	70	70		
0.0078125	0.0078125	50	20	y	
0.0078125	0.015625	70	50	y	
Q.113 rate ppm	Azoxystrobin rate ppm	Activity (%)	P	S?	
0.5		0			
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.25	20			
	0.125	0			
0.5	0.125	20	0	y	
0.25	0.125	20	0	y	
0.125	0.125	20	0	y	
0.125	0.25	50	20	y	
0.0625	0.125	20	0	y	
0.0625	0.25	50	20	y	
0.03125	0.125	20	0	y	
Q.113 rate ppm	Picoxystrobin rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
	2	50			
	1	50			
	0.5	50			
2	2	70	50	y	
2	1	70	50	y	
2	0.5	70	50	y	
1	2	70	50	y	
1	1	70	50	y	
0.5	2	70	50	y	
Q.113 rate ppm	Trifloxystrobin rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
	2	50			
	1	50			
	0.5	50			
2	2	70	50	y	
2	1	70	50	y	
2	0.5	70	50	y	
1	2	70	50	y	
1	1	70	50	y	
0.5	2	70	50	y	
Q.113 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
0.25		0			
0.125		0			
	0.05	70			
	0.025	0			
2	0.05	90	70	y	
1	0.025	50	0	y	
1	0.05	90	70	y	
0.5	0.025	20	0	y	
0.5	0.05	90	70	y	
0.25	0.025	0	0		
0.25	0.05	100	70	y	
0.125	0.025	20	0	y	
0.125	0.05	90	70	y	

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Q.113 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?
2		0		
1		0		
0.5		0		
0.25		0		
0.125		0		
	0.5	50		
	0.25	0		
2	0.5	70	50	y
1	0.25	20	0	y
1	0.5	70	50	y
0.5	0.25	20	0	y
0.5	0.5	70	50	y
0.25	0.25	0	0	
0.25	0.5	70	50	y
0.125	0.25	20	0	y
Q.062 rate ppm	Fluxapyroxad rate ppm	Activity (%)	P	S?
0.03125		0		
0.015625		0		
0.0078125		0		
0.00390625		0		
	0.125	70		
	0.0625	50		
	0.03125	50		
	0.015625	20		
0.03125	0.0625	70	50	y
0.03125	0.125	90	70	y
0.015625	0.0625	70	50	y
0.0078125	0.03125	70	50	y
0.00390625	0.015625	50	20	y
0.0078125	0.015625	50	20	y
Q.062 rate ppm	Pyraclostrobin rate ppm	Activity (%)	P	S?
2		0		
1		0		
0.5		0		
	2	70		
2	2	90	70	y
1	2	90	70	y
0.5	2	90	70	y
Q.062 rate ppm	Chlorotalonil rate ppm	Activity (%)	P	S?
1		0		
0.5		0		
0.25		0		
	0.25	20		
1	0.25	50	20	y
0.5	0.25	50	20	y
0.25	0.25	50	20	y
Q.062 rate ppm	Picoxystrobin rate ppm	Activity (%)	P	S?
2		0		
1		0		
0.5		0		
	2	50		
	1	50		
	0.5	50		
2	2	70	50	y
2	1	70	50	y
2	0.5	70	50	y
1	2	70	50	y
1	1	70	50	y
1	0.5	70	50	y
0.5	2	70	50	y
0.5	1	70	50	y

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Q.062 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?
5	0.25	0		
	0.1258	0		
	0.0625	0		
	0.03125	0		
	0.0625	50		
	0.03125	0		
10	0.25	90	50	y
	0.125	20	0	y
	0.125	90	50	y
	0.0625	100	50	y
	0.0625	20	0	y
	0.03125	20	0	y
15	Prothioconazole rate ppm	Activity (%)	P	S?
	.062 rate ppm			
	2	0		
	1	0		
	0.5	0		
20	0.25	0		
	0.125	0		
	0.05	50		
	0.025	0		
	2	100	50	y
	1	50	0	y
25	1	100	50	y
	0.5	50	0	y
	0.5	90	50	y
	0.25	20	0	y
	0.25	90	50	y
	0.125	20	0	y
30	0.125	90	50	y
Q.062 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?
35	2	0		
	1	0		
	0.5	0		
	2	0		
	1	0		
	0.5	0		
40	2	50	0	y
	2	20	0	y
	2	20	0	y
	1	20	0	y
	0.5	20	0	y
45	Q.062 rate ppm	Activity (%)	P	S?
	1	0		
	0.5	0		
	0.25	0		
	0.125	0		
50	5	70		
	2.5	0		
	1.25	0		
	1	100	70	y
	1	70	0	y
	0.5	100	70	y
	0.5	20	0	y
	0.5	20	0	y
	0.25	100	70	y
	0.125	100	70	y
	0.125	100	0	y
60	Q.062 rate ppm	Activity (%)	P	S?
	2	0		
	1	0		
	0.5	0		
	0.25	0		
65	2	0		
	1	0		
	0.5	0		
	0.25	0		

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0.125		0			
	0.5	70			
	0.25	0			
	0.125	0			
2	0.5	100	70	y	
1	0.5	100	70	y	
1	0.25	100	0	y	
0.5	0.5	100	70	y	
0.5	0.25	70	0	y	
0.5	0.125	20	0	y	
0.25	0.5	100	70	y	
0.25	0.25	70	0	y	
0.125	0.5	90	70	y	
0.125	0.25	20	0	y	
Q.062 rate ppm	Procymidone rate ppm	Activity (%)	P	S?	
0.125		0			
0.0625		0			
0.03125		0			
0.015625		0			
	1.25	0			
	0.625	0			
	0.3125	0			
0.125	1.25	70	0	y	
0.0625	1.25	100	0	y	
0.03125	1.25	90	0	y	
0.015625	0.625	70	0	y	
0.015625	0.3125	50	0	y	
Q.062 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
0.25		0			
0.125		0			
	0.5	50			
	0.25	0			
2	0.5	90	50	y	
1	0.25	50	0	y	
1	0.5	70	50	y	
0.5	0.25	20	0	y	
0.5	0.5	70	50	y	
0.25	0.25	0	0		
0.25	0.5	70	50	y	
0.125	0.25	20	0	y	

Septoria tritici (Leaf Blotch)

Conidia of the fungus from cryogenic storage were directly mixed into nutrient broth (PDB potato dextrose broth). After placing a (DMSO) solution of the test compounds into a microtiter plate (96-well format) the nutrient broth containing the fungal spores was added. The test plates were incubated at 24° C. and the activity was determined visually after 72 hrs.

Q.135 rate ppm	Fluxapyroxad rate ppm	Activity (%)	P	S?	
0.03125		0			
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.0625	20			
	0.03125	0			
	0.015625	0			
0.03125	0.0625	70	20	y	
0.015625	0.03125	20	0	y	
0.015625	0.0625	90	20	y	
0.0078125	0.03125	50	0	y	
0.00390625	0.015625	20	0	y	

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Q.135 rate ppm	Metconazole rate ppm	% Activity	P	S?	
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.0625	70			
	0.03125	0			
0.25	0.0625	90	70	y	
0.125	0.0625	90	70	y	
0.125	0.03125	50	0	y	
0.0625	0.0625	100	70	y	
0.0625	0.03125	20	0	y	
0.03125	0.03125	20	0	y	
Q.135 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?	
1		0			
0.5		0			
0.25		0			
0.125		0			
	5	50			
	2.5	0			
	1.25	0			
	0.625	0			
1	2.5	50	0	y	
1	5	70	50	y	
0.5	5	90	50	y	
0.5	2.5	50	0	y	
0.5	1.25	20	0	y	
0.25	5	70	50	y	
0.25	2.5	50	0	y	
0.25	1.25	20	0	y	
0.25	0.625	20	0	y	
0.125	5	70	50	y	
0.125	2.5	50	0	y	
0.125	1.25	20	0	y	
0.125	0.625	20	0	y	
Q.135 rate ppm	Fluopyram rate ppm	Activity (%)	P	S?	
1		0			
0.5		0			
0.25		0			
	0.25	50			
1	0.25	90	50	y	
0.5	0.25	70	50	y	
0.25	0.25	70	50	y	
Q.135 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?	
0.5		0			
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.0125	70			
0.5	0.0125	90	70	y	
0.25	0.0125	90	70	y	
0.125	0.0125	90	70	y	
0.0625	0.0125	90	70	y	
0.03125	0.0125	90	70	y	
Q.135 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?	
0.5		0			
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.125	50			
0.5	0.125	90	50	y	
0.25	0.125	90	50	y	
0.125	0.125	90	50	y	

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0.0625	0.125	90	50	y	
0.03125	0.125	90	50	y	
Q.135 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
	1	0			
	0.5	0			
2	1	90	0	y	
2	0.5	50	0	y	
1	1	70	0	y	
1	0.5	20	0	y	
0.5	1	50	0	y	
0.5	0.5	20	0	y	
Q.135 rate ppm	Mandipropamid rate ppm	% Activity	P	S?	
	2		0		
1		0			
0.5		0			
0.25		0			
	0.5	70			
2	0.5	700	70	y	
1	0.5	90	70	y	
0.5	0.5	70	70		
0.25	0.5	90	70	y	
Q.135 rate ppm	Penflufen rate ppm	Activity (%)	P	S?	
2		0			
1		0			
0.5		0			
	0.5	70			
	0.25	20			
	0.125	0			
2	0.5	100	70	y	
1	0.5	90	70	y	
1	0.25	70	20	y	
0.5	0.25	50	20	y	
0.5	0.125	20	0	y	
Q.135 rate ppm	Fluazinam rate ppm	Activity (%)	P	S?	
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.03125	20			
	0.015625	0			
0.015625	0.03125	50	20	y	
0.0078125	0.03125	50	20	y	
0.0078125	0.015625	20	0	y	
0.00390625	0.015625	20	0	y	
Q.113 rate ppm	Fluxapyroxad rate ppm	Activity (%)	P	S?	
0.03125		0			
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.0625	20			
	0.03125	0			
	0.015625	0			
0.03125	0.0625	70	20	y	
0.015625	0.03125	20	0	y	
0.015625	0.0625	90	20	y	
0.0078125	0.03125	50	0	y	
0.00390625	0.015625	20	0	y	

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Q.113 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?	
2		0			5
1		0			
0.5		0			
	1	0			
	0.5	0			
2	1	70	0	y	
2	0.5	20	0	y	10
1	1	70	0	y	
1	0.5	20	0	y	
0.5	1	70	0	y	
0.5	0.5	20	0	y	
Q.113 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?	
0.5		0			
0.125		0			
0.0625		0			
0.03125		0			
0.015625		0			20
	2.5	50			
	0.625	0			
	0.3125	20			
	0.15625	0			
0.5	2.5	90	50	y	25
0.125	2.5	70	0	y	
0.0625	0.625	70	50	y	
0.03125	0.15625	20	0	y	
0.015625	0.3125	70	20	y	
Q.113 rate ppm	Picoxystrobin rate ppm	Activity (%)	P	S?	
0.0078125		0			30
0.00390625		0			
	0.03125	90			
	0.015625	70			35
	0.0078125	50			
0.0078125	0.03125	90	70	y	
0.0078125	0.015625	90	70	y	
0.00390625	0.0078125	70	50	y	
Q.113 rate ppm	Fluazinam rate ppm	Activity (%)	P	S?	
0.015625		0			40
0.0078125		0			
0.00390625		0			
	0.03125	20			
	0.015625	0			45
0.015625	0.03125	50	20	y	
0.0078125	0.03125	50	20	y	
0.0078125	0.015625	20	0	y	
0.00390625	0.015625	20	0	y	
Q.113 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?	
1		0			50
0.5		0			
0.25		0			
	0.25	70			
1	0.25	90	70	y	55
0.5	0.25	90	70	y	
0.25	0.25	90	70	y	
Q.113 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?	
0.5		0			60
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			
	0.0125	70			65
0.5	0.0125	90	70	y	

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0.25	0.0125	90	70	y	5
0.125	0.0125	90	70	y	
0.0625	0.0125	90	70	y	
0.03125	0.0125	90	70	y	
Q.113 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?	
0.5		0			10
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			15
	0.125	50			
0.5	0.125	90	50	y	
0.25	0.125	70	50	y	
0.125	0.125	70	50	y	20
0.0625	0.125	70	50	y	
0.03125	0.125	70	50	y	
Q.062 rate ppm	Isopyrazam rate ppm	Activity (%)	P	S?	
0.0078125		0			25
0.00390625		0			
	0.03125	20			
	0.015625	0			
0.0078125	0.03125	70	20	y	30
0.00390625	0.015625	70	0	y	
Q.062 rate ppm	Fluxapyroxad rate ppm	Activity (%)	P	S?	
0.03125		0			35
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.0625	20			40
	0.03125	0			
	0.015625	0			
0.03125	0.0625	70	20	y	
0.015625	0.03125	20	0	y	45
0.015625	0.0625	90	20	y	
0.0078125	0.03125	70	0	y	
0.00390625	0.015625	20	0	y	
Q.062 rate ppm	Flutriafol rate ppm	Activity (%)	P	S?	
2		0			50
1		0			
0.5		0			
	1	0			
	0.5	0			55
2	1	70	0	y	
2	0.5	20	0	y	
1	1	70	0	y	
1	0.5	20	0	y	60
0.5	1	70	0	y	
Q.062 rate ppm	Picoxystrobin rate ppm	Activity (%)	P	S?	
0.03125		0			65
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.015625	70			70
	0.0078125	20			
0.03125	0.0078125	50	20	y	
0.015625	0.0078125	20	20	y	
0.0078125	0.0078125	70	20	y	75
0.0078125	0.0015625	100	70	y	
0.00390625	0.0078125	90	20	y	

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Q.062 rate ppm	Fluazinam rate ppm	Activity (%)	P	S?	
0.03125		0			5
0.015625		0			
0.0078125		0			
0.00390625		0			
	0.0625	70			10
	0.03125	20			
	0.015625	0			
0.03125	0.0625	90	70	y	
0.015625	0.0625	90	70	y	15
0.015625	0.03125	50	20	y	
0.0078125	0.03125	50	20	y	
0.0078125	0.015625	20	0	y	
0.00390625	0.015625	20	0	y	20
Q.062 rate ppm	Metconazole rate ppm	Activity (%)	P	S?	
0.25		0			
0.125		0			
0.0625		0			
0.03125		0			25
	0.0625	50			
0.25	0.0625	70	50	y	
0.125	0.0625	70	50	y	
0.0625	0.0625	70	50	y	30
0.03125	0.0625	70	50	y	
Q.062 rate ppm	Paclobutrazol rate ppm	Activity (%)	P	S?	
1		0			35
0.5		0			
0.25		0			
	10	70			
	5	70			40
	2.5	20			
	1.25	0			
	0.625	0			
1	2.5	50	20	y	45
0.5	10	100	70	y	
0.5	2.5	70	20	y	
0.5	1.25	20	0	y	
0.25	10	100	70	y	50
0.25	5	100	70	y	
0.25	2.5	70	20	y	
0.25	0.625	90	0	y	
Q.062 rate ppm	Fluopyram rate ppm	Activity (%)	P	S?	
0.125		0			55
0.0625		0			
0.03125		0			
	0.25	50			
	0.125	0			60
0.125	0.25	70	50	y	
0.0625	0.25	70	50	y	
0.0625	0.125	20	0	y	
0.03125	0.125	20	0	y	65
Q.062 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?	
0.5		0			
0.25		0			
0.125		0			
0.0625		0			70
0.03125		0			
	0.0125	70			
0.5	0.0125	90	70	y	
0.25	0.0125	90	70	y	75
0.125	0.0125	90	70	y	
0.0625	0.0125	90	70	y	
0.03125	0.0125	90	70	y	

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-continued

Q.062 rate ppm	Propiconazole rate ppm	Activity (%)	P	S?
0.5		0		
0.25		0		
0.125		0		
0.0625		0		
0.03125		0		
	0.125	50		
0.5	0.125	90	50	y
0.25	0.125	90	50	y
0.125	0.125	90	50	y
0.0625	0.125	70	50	y
0.03125	0.125	70	50	y

Gaeumannomyces graminis (Take-all of Cereals)

Mycelial fragments of the fungus from cryogenic storage were directly mixed into nutrient broth (PDB potato dextrose broth). After placing a (DMSO) solution of the test compounds into a microtiter plate (96-well format) the nutrient broth containing the fungal spores was added. The test plates were incubated at 24° C. and the activity was determined visually after 48 hrs

Compound (V) rate ppm	Activity (%)	P	S?
Q.113 rate ppm			
0.25	0		
0.125	0		
0.0625	0		
0.03125	0		
0.015625	0		
	0.0625	70	
	0.03125	20	
	0.015625	0	
0.25	0.0625	90	70 y
0.125	0.03125	50	20 y
0.0625	0.015625	20	0 y
0.0625	0.03125	50	20 y
0.03125	0.0625	90	70 y
0.015625	0.03125	50	20 y
Q.062 rate ppm			
0.015625		0	
0.0078125		0	
0.00390625		0	
	0.0625	70	
	0.03125	20	
	0.015625	0	
0.015625	0.03125	50	20 y
0.0078125	0.015625	20	0 y
0.015625	0.0625	100	70 y
0.0078125	0.03125	70	20 y
0.00390625	0.015625	20	0 y

Pythium ultimum (Damping Off):

Mycelial fragments of the fungus, prepared from a fresh liquid culture, were directly mixed into nutrient broth (PDB potato dextrose broth). After placing a (DMSO) solution of the test compounds into a microtiter plate (96-well format) the nutrient broth containing the fungal spores was added. The test plates were incubated at 24° C. and the activity was determined visually after 48 hrs

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Q.135 rate ppm	Mefenoxam rate ppm	Activity (%)	P	S?
0.0625		0		
0.03125		0		
0.015625		0		
0.0078125		0		
	0.03125	50		
0.0625	0.03125	70	50	y
0.03125	0.03125	50	50	
0.015625	0.03125	70	50	y
0.0078125	0.03125	70	50	y

Mycosphaerella arachidis (y. *Cercospora arachidicola*),

Brown leaf spot of groundnut (peanut): Conidia of the fungus from cryogenic storage were directly mixed into nutrient broth (PDB potato dextrose broth). After placing a (DMSO) solution of the test compounds into a microtiter plate (96-well format) the nutrient broth containing the fungal spores was added. The test plates were incubated at 24° C. and activity was determined visually after 5-6 days.

Q.135 rate ppm	Sedaxan rate ppm	Activity (%)	P	S?
0.0625		50		
0.03125		50		
0.015625		20		
0.0078125		0		
	0.03125	0		
	0.015625	0		
	0.00390625	0		
0.0625	0.03125	70	50	y
0.0625	0.015625	70	50	y
0.03125	0.03125	50	50	
0.015625	0.00390625	50	20	y
0.0078125	0.00390625	20	0	y

Q.135 rate ppm	Fluazinam rate ppm	Activity (%)	P	S?
0.0625		50		
0.03125		50		
0.15625		0		
0.0078125		0		
	0.03125	0		
	0.015625	0		
	0.0078125	0		
	0.00390625	0		
0.0625	0.015625	70	50	y
0.03125	0.015625	50	50	y
0.015625	0.03125	20	0	y
0.015625	0.015625	20	0	y
0.015625	0.0078125	50	0	y
0.015625	0.00390625	50	0	y
0.0078125	0.03125	20	0	y
0.0078125	0.00390625	20	0	y

Q.135 rate ppm	Cyprodinil rate ppm	% Activity	P	S?
0.03125		50		
0.015625		20		
	0.00125	0		
	0.0625	0		
	0.003125	0		
	0.0015625	0		
	0.00078125	0		
0.03125	0.00078125	90	50	y
0.03125	0.0015625	70	50	y
0.03125	0.003125	70	50	y
0.03125	0.00625	70	50	y
0.03125	0.0125	70	50	y
0.015625	0.00078125	50	20	y

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-continued

Q.135 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?
0.03125		50		
0.015625		20		
	0.0625	0		
	0.03125	0		
	0.015625	0		
	0.0078125	0		
	0.00390625	0		
0.03125	0.015625	70	50	y
0.015625	0.0625	50	20	y
0.015625	0.03125	50	20	y
0.015625	0.015625	50	20	y
0.015625	0.0078125	50	20	y
0.015625	0.00390625	50	20	y
Q.135 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?
0.0625		70		
0.03125		70		
0.015625		70		
0.0078125		20		
0.00390625		0		
	0.03125	70		
	0.015625	50		
	0.0078125	20		
	0.00390625	20		
0.0625	0.015625	100	85	y
0.03125	0.015625	100	85	y
0.015625	0.0078125	90	76	y
0.015625	0.00390625	90	76	y
0.0078125	0.03125	100	76	y
0.0078125	0.0078125	50	36	y
0.0078125	0.00390625	50	36	y
0.00390625	0.015625	70	50	y
0.00390625	0.0078125	50	20	y
Q.113 rate ppm	Sedaxan rate ppm	Activity (%)	P	S?
0.125		20		
0.0625		0		
	0.125	0		
	0.0625	0		
	0.03125	0		
	0.015625	0		
0.125	0.125	50	20	y
0.0625	0.125	20	0	y
0.0625	0.0625	20	0	y
0.0625	0.03125	20	0	y
0.0625	0.015625	20	0	y
Q.113 rate ppm	Fluazinam rate ppm	Activity (%)	P	S?
0.03125		0		
0.015625		0		
0.0078125		0		
	0.0625	20		
	0.03125	0		
0.03125	0.0625	50	20	y
0.015625	0.0625	50	20	y
0.0078125	0.03125	20	0	y
Q.113 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?
0.5		70		
0.25		70		
0.125		50		
0.0625		20		
0.03125		0		
	0.5	70		
	0.25	0		
	0.125	0		
0.5	0.25	100	70	y
0.25	0.25	90	70	y

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0.125	0.5	100	85	y
0.125	0.25	70	50	y
0.0625	0.25	50	20	y
0.03125	0.125	20	0	y
Q.113 rate ppm	Fenpropimorph rate ppm	Activity (%)	P	S?
0.125		50		
0.0625		50		
0.03125		20		
0.015625		0		
	0.0625	70		
	0.03125	50		
0.125	0.0625	100	85	y
0.125	0.03125	100	75	y
0.0625	0.03125	90	75	y
0.03125	0.0625	100	76	y
0.015625	0.03125	70	50	y
Q.062 rate ppm	Bixafen rate ppm	Activity (%)	P	S?
0.0625		0		
0.03125		0		
0.015625		0		
	0.0625	70		
	0.03125	50		
0.0625	0.0625	90	70	y
0.03125	0.0625	90	70	y
0.015625	0.0625	100	70	y
0.015625	0.03125	70	50	y
Q.062 rate ppm	Fludioxonil rate ppm	Activity (%)	P	S?
2		70		
1		70		
0.5		0		
0.25		0		
0.125		0		
	0.5	50		
	0.25	0		
	0.125	0		
2	0.5	100	85	y
1	0.5	100	85	y
0.5	0.5	100	50	y
0.5	0.25	50	0	y
0.5	0.125	20	0	y
0.25	0.5	70	50	y
0.25	0.25	20	0	y
0.125	0.25	20	0	y
Q.062 rate ppm	Cyprodinil rate ppm	Activity (%)	P	S?
1		70		
	0.2	0		
	0.1	0		
	0.05	0		
	0.025	0		
1	0.025	90	70	y
1	0.1	90	70	y
1	0.2	90	70	y

Septoria tritici (Leaf Blotch):

After placing solutions of the test compounds (containing 0.2% DMSO) into a microtiter plate (96-well format), an equal amount of the nutrient broth (YBG) was added to each of the well. Finally the fungal spore solution was added. The test plates were incubated at 20° C. The inhibition of growth was determined photometrically after 6 days and the activity calculated in relation to untreated control.

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Q.135 rate ppm	Tebuconazole rate ppm	Activity (%)	P	S?
1.25		24		
0.625		25		
0.3125		35		
	1.25	0		
1.25	1.25	59	24	y
0.625	1.25	51	25	y
0.3125	1.25	54	35	y
Q.135 rate ppm	Epoxiconazole rate ppm	% Activity	P	S?
1.25		22		
0.625		32		
0.3125		34		
0.15625		29		
	0.3125	78		
	0.15625	65		
1.25	0.3125	95	83	y
0.625	0.3125	98	85	y
0.625	0.15625	94	76	y
0.3125	0.3125	100	86	y
0.15625	0.3125	100	85	y
0.15625	0.15625	98	75	y
Q.113 rate ppm	Cyproconazole rate ppm	Activity (%)	P	S?
10		63		
	1	84		
	0.5	64		
	0.25	0		
10	1	100	94	y
10	0.5	100	87	y
10	0.25	86	63	y
Q.113 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?
0.15625		42		
0.078125		31		
0.0390625		28		
0.01953125		15		
	0.0390625	63		
	0.01953125	69		
0.15625	0.0390625	96	78	y
0.078125	0.0390625	100	74	y
0.078125	0.01953125	100	79	y
0.0390625	0.0390625	99	73	y
0.01953125	0.0390625	100	68	y
0.01953125	0.01953125	93	74	y
Q.113 rate ppm	Epoxiconazole rate ppm	Activity (%)	P	S?
1.25		42		
0.625		39		
0.3125		34		
0.15625		34		
0.078125		33		
	0.3125	50		
1.25	0.3125	97	71	y
0.625	0.3125	100	70	y
0.3125	0.3125	99	67	y
0.15625	0.3125	99	67	y
0.078125	0.3125	98	67	y
Q.062 rate ppm	Cyproconazole rate ppm	Activity (%)	P	S?
5		64		
2.5		49		
1.25		48		
	2.5	76		
	1.25	39		
5	1.25	96	78	y
2.5	2.5	100	88	y
2.5	1.25	86	69	y

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1.25	2.5	98	88	y
1.25	1.25	87	69	y
Q.062 rate ppm	Prothioconazole rate ppm	Activity (%)	P	S?
0.3125		33		
0.15625		38		
0.0078125		31		
	0.0625	63		
	0.03125	9		
0.3125	0.0625	88	75	y
0.15625	0.0625	98	77	y
0.078125	0.03125	63	37	y
Q.062 rate ppm	Tebuconazole rate ppm	Activity (%)	P	S?
5		57		
2.5		41		
1.25		51		
	5	73		
	2.5	47		
5	5	100	89	y
5	2.5	96	77	y
2.5	5	100	84	y
2.5	2.5	81	69	y
1.25	5	99	87	y
Q.062 rate ppm	Prochloraz rate ppm	Activity (%)	P	S?
0.625		35		
0.3125		37		
	0.03125	80		
	0.015625	48		
0.625	0.03125	98	87	y
0.625	0.015625	79	66	y
0.3125	0.03125	97	87	y
Q.062 rate ppm	Epoxiconazole rate ppm	Activity (%)	P	S?
2.5		48		
1.25		51		
0.625		48		
0.3125		42		
	0.625	71		
	0.3125	33		
2.5	0.625	98	85	y
1.25	0.3125	77	67	y
0.625	0.3125	79	65	y
0.3125	0.3125	71	61	y
Q.062 rate ppm	Difenoconazole rate ppm	Activity (%)	P	S?
0.625		40		
0.3125		36		
0.15625		39		
0.078125		29		
0.00390625		32		
	0.15625	48		
0.625	0.15625	89	69	y
0.3125	0.15625	81	67	y
0.15625	0.15625	77	68	y
0.078125	0.15625	81	63	y
0.00390625	0.15625	84	64	y
Q.062 rate ppm	Compound (S)-(VII) rate ppm	Activity (%)	P	S?
0.625		26		
0.3125		22		
	0.125	62		
	0.0625	44		
	0.03125	0		

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Sclerotinia sclerotiorum on Oilseed Rape, Preventive Treatment

The compound activity was tested under 1 day preventive conditions. Oilseed rape plants with 3 unfolded leaves were sprayed with a track sprayer and 200 l/ha spray volume with the test compounds, either solo or in tankmix as shown in the table below.

1 day after application the plants were infested with a solution of *Sclerotinia sclerotiorum* mycelium. The plants were placed under plastic hoods and high humidity conditions in a climate chamber at 14 h day/10 h night cycle and 15° C. Disease infestation was evaluated visually 11 days after application and average activity calculated in relation to disease severity on untreated check.

	Boscalid rate g a.i./ha	Activity (%)	P	S?
<u>Q.135</u> rate ppm				
100		15		
50		0		
25		0		
	100	25		
	50	8		
100	100	59	36	y
50	50	49	8	y
25	100	76	25	y
100	50	62	21	y
50	50	92	10	y
25	100	83	25	y
100	50	93	32	y
<u>Q.113</u> rate ppm				
100		39		
50		2		
25		2		
	100	25		
	50	8		
100	100	83	54	y
50	50	89	10	y
25	100	83	26	y
100	50	86	44	y
<u>Q.062</u> rate ppm				
100		26		
50		2		
25		0		
	100	25		
	50	8		
100	100	91	44	y
50	50	92	10	y
25	100	83	25	y
100	50	93	32	y

Sphaerotheca fuliginea (Powdery Mildew) on Cucumber, Preventive Treatment

The compound activity was tested under 2 days preventive conditions. Cucumber plants with unfolded cotyledons were sprayed with a roomsprayer and 40 ml/4 plants spray volume with the test compounds, either solo or in tankmix as shown in the table below.

2 days after application the plants were infested with spores of *Sphaerotheca fuliginea*. The plants were placed in a climate chamber under 70% rel. humidity, 22° C. and 14 h day/10 h night cycle. Disease infestation was evaluated visually 10 days after application and average activity calculated in relation to disease severity on untreated check.

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	Acibenzolar-s- methyl rate ppm	Activity (%)	P	S?
<u>Q.135</u> rate ppm				
2		0		
0.6		0		
0.2		0		
	20	4		
	6	0		
	2	0		
	0.6	0		
2	20	49	4	y
2	6	16	0	y
0.6	6	15	0	y
0.6	2	4	0	
0.2	2	3	0	
<u>Q.113</u> rate ppm				
2		0		
0.6		0		
0.2		0		
	20	4		
	6	0		
	2	0		
	0.6	0		
2	20	18	4	y
2	6	12	0	y
0.6	6	5	0	
0.6	2	7	0	
0.2	2	9	0	y
<u>Q.062</u> rate ppm				
2		7		
0.6		0		
0.2		0		
	20	4		
	6	0		
	2	0		
	0.6	0		
2	20	11	11	
2	6	4	7	
0.6	6	9	0	y
0.6	2	5	0	
0.2	2	9	0	y

Fusarium spp. on Wheat, Preventive Treatment

The compound activity was tested under 1 day preventive condition. Flowering wheat plants were sprayed with a track sprayer and 220 l/ha spray volume with the test compounds, either solo or in tankmix as shown in the table below. The compounds were formulated as standard EC100 and diluted into water to the given spray-dosis.

1 day after application the flowering ears were infested with a mix of spores of *Fusarium graminearum* and *Fusarium culmorum*. The plants were placed in a climate chamber under 60% rel. humidity, and 14 h day/10 h night cycle with 23/21° C. Disease infestation was evaluated visually 9 days after application and average activity calculated in relation to disease severity on untreated check.

	Compound	g a.i./ha	Activity (%)	P	S?
<u>Prothioconazole (PTZ)</u>					
	Q.062	200	17		
	Q.135	200	28		
	Q.113	200	23		
	Q.151	200	3		
	PTZ + Q.062	200 + 50	83	63	y
	PTZ + Q.135	200 + 50	86	68	y

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-continued

Compound	g a.i./ha	Activity (%)	P	S?
PTZ + Q.113	200 + 50	85	65	y
PTZ + Q.151	200 + 50	88	56	y

Phakopsora pachyrhizi on Soybean, Preventive Treatment

The compound activity was tested under 1 day preventive conditions. Soybean plants with a fully enfolded first trifoliate leaf were sprayed with a track sprayer and 50 l/ha spray volume with the test compounds, either solo or in tankmix as shown in the table below. 1 day after application leaf discs were cut from the first trifoliate leaf and placed in multiwell plates on water-agar. 5 leaf discs per treatment where infested with spores of a triazole tolerant soybeanrust strain. The multiwell plates were sealed and placed in an incubator 48 h in darkness and 12 h light/dark cycle afterwards. Rust infestation on leaf discs was evaluated visually 11 days after application and average activity calculated in relation to disease severity on untreated check leaf discs.

Compound	Rate (g ai/ha)	Activity (%)	P	S?
Cyproconazole	2	53	N/A	N/A
Cyproconazole	0.5	38	N/A	N/A
Q.062	2	13	N/A	N/A
Q.062	0.5	0	N/A	N/A
Q.063	2	0	N/A	N/A
Q.063	0.5	0	N/A	N/A
Q.113	2	25	N/A	N/A
Q.113	0.5	1	N/A	N/A
Q.135	2	41	N/A	N/A
Q.135	0.5	13	N/A	N/A
Q.062 +	2 + 2	99	59	Yes
Cyproconazole				
Q.062 +	2 + 0.5	78	46	Yes
Cyproconazole				
Q.062 +	0.5 + 2	96	53	Yes
Cyproconazole				
Q.063 +	2 + 2	100	53	Yes
Cyproconazole				
Q.063 +	2 + 0.5	98	38	Yes
Cyproconazole				
Q.063 +	0.5 + 2	98	53	Yes
Cyproconazole				
Q.113 +	2 + 2	100	65	Yes
Cyproconazole				
Q.113 +	2 + 0.5	94	54	Yes
Cyproconazole				
Q.113 +	0.5 + 2	96	54	Yes
Cyproconazole				
Q.135 +	2 + 2	95	72	Yes
Cyproconazole				
Q.135 +	2 + 0.5	98	72	Yes
Cyproconazole				
Q.135 +	0.5 + 2	97	46	Yes
Cyproconazole				

Septoria tritici on Wheat, Preventive Treatment

Four pots per treatment with 4 plants of the wheat variety Riband in each of 6.5 cm pots have been treated 14 days after sowing with the compounds given in the results table. The compounds were formulated as standard EC100 and diluted into water to the given spray-dosis. One day after application of the compounds solo and in mixture, the plants were infested with spores of *Septoria tritici*. To enable a good infestation, the plants were covered with a plexiglas hood for 48 h after inoculation. The plants grew in a controlled environment for 14 h at 21° C. during day and 10 h at 19° C. during night. 18 days after application the infestation of the 2nd leaf

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of each of the plants and of the untreated, infested check was evaluated visually. The activity data in the table then derived from a calculation of the infestation of the means of the 4 plants of 4 repetitions of each of the solo or mixture treatments with the mean of the of the 4 plants of 4 repetitions of the untreated infested check.

	ga/ha	Activity (%)	P	S?
compound (VII)	27	96	N/A	N/A
	9	20		
	3	0		
Q.062	27	71	N/A	N/A
	9	8		
	3	6		
Q.135	27	82	N/A	N/A
	9	33		
	3	0		
Q.113	27	16	N/A	N/A
	9	0		
	3	0		
Q.151	27	0	N/A	N/A
	9	0		
	3	0		
compound (VII) +	9 + 27	98	77	Y
Q.062	3 + 9	36	8	Y
compound (VII) +	27 + 27	99	99	
Q.062	9 + 9	93	26	Y
compound (VII) +	27 + 9	97	97	
Q.062	9 + 3	58	25	Y
compound (VII) +	9 + 27	98	47	Y
Q.135	3 + 9	47	0	Y
compound (VII) +	27 + 27	100	99	
Q.135	9 + 9	92	47	Y
compound (VII) +	27 + 9	100	98	
Q.135	9 + 3	91	20	Y
compound (VII) +	9 + 27	97	33	Y
Q.113	3 + 9	38	0	Y
compound (VII) +	27 + 27	100	97	
Q.113	9 + 9	76	20	Y
compound (VII) +	27 + 9	99	96	
Q.113	9 + 3	70	20	Y
compound (VII) +	9 + 27	97	20	Y
Q.151	3 + 9	69	0	Y
compound (VII) +	27 + 27	99	96	
Q.151	9 + 9	96	20	Y
compound (VII) +	27 + 9	99	96	
Q.151	9 + 3	71	20	Yes
Compound	g a.i./ha	Activity (%)	P	S?
Difenoconazole (DFZ)	27	5		
	9	3		
	3	0		
	1	0		
	0.33	0		
Q.062	81	61		
	27	50		
	9	26		
	3	8		
	1	2		
Q.135	81	70		
	27	52		
	9	43		
	3	9		
	1	0		
Q.113	81	53		
	27	61		
	9	29		
	3	0		
	1	1		
Q.151	81	43		
	27	13		
	9	0		
	3	4		
	1	0		

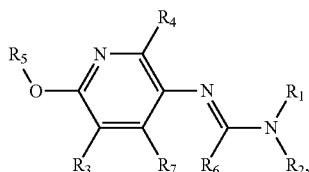
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DFZ + Q.062	27 + 81 9 + 27 27 + 27 9 + 9 27 + 9 9 + 3	97 49 85 21 61 0	63 51 52 28 30 10	Y Y Y Y	5
DFZ + Q.135	27 + 81 9 + 27 27 + 27 9 + 9 27 + 9 9 + 3	100 92 90 42 68 41	71 54 55 45 46 12	Y Y Y Y Y	10
DFZ + Q.113	27 + 81 9 + 27 27 + 27 9 + 9 27 + 9 9 + 3	98 94 95 69 91 50	56 62 63 31 32 3	Y Y Y Y Y Y	15
DFZ + Q.151	27 + 81 9 + 27 27 + 27 9 + 9 27 + 9 9 + 3	94 68 97 64 85 28	46 15 17 3 5 7	Y Y Y Y Y Y	20

What is claimed is:

1. A fungicidal composition, comprising a combination of components A) and B), wherein component A) is a compound of formula (I)



wherein

R₁ and R₂ are each independently selected from hydrogen, C₁-C₄ alkyl, C₃-C₄ alkenyl, C₃-C₄ alkynyl, (R₁₀)carbonyl and (R₁₀)oxycarbonyl;

or R₁ and R₂ together with the nitrogen atom to which they are attached form a 5- or 6 membered cyclic group which may be saturated or unsaturated and may contain a further heteroatom selected from S or O;

R₃ represents hydrogen, halogen, cyano, nitro, mercapto, hydroxy, —C(=S)NH₂, —SF₅, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ cycloalkyl, amino, C₁-C₂ alkylamino, di(C₁-C₆alkyl)amino, a 5-membered heterocycle containing 1-4 nitrogen atoms, piperidino, morpholino, thiomorpholino, formyl, hydroxycarbonyl, C₂-C₇ alkoxycarbonyl, C₂-C₇ haloalkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ haloalkenyloxycarbonyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ hydroxyalkyl, phenyl or benzyl wherein the phenyl and benzyl are optionally substituted by one or more groups independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl;

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R₄ represents hydrogen, halogen, cyano, amino, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, methylamino or dimethylamino;

R₅ is hydrogen, C₁-C₁₂alkyl, C₃-C₁₂alkenyl, C₃-C₁₂alkynyl, C₁-C₁₂alkylsulfonyl, C₂-C₁₂alkenylsulfonyl, phenylsulfonyl or benzylsulfonyl, or is C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂alkynyl, C₁-C₁₂alkylsulfonyl, C₂-C₁₂alkenylsulfonyl, phenylsulfonyl or benzylsulfonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, C₂-C₇alkylcarbonyl, C₂-C₇haloalkylcarbonyl, C₁-C₆alkyl, C₁-C₆haloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₁-C₆alkylthio, C₁-C₆alkylsulfinyl and C₁-C₆alkylsulfonyl; or

R₅ is formyl, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₃-C₁₂ alkynylcarbonyl, C₄-C₁₂ cycloalkylcarbonyl, benzylcarbonyl, phenylcarbonyl, C₂-C₁₂ alkoxycarbonyl, C₄-C₁₂ alkenyloxycarbonyl, C₄-C₁₂ alkenyloxycarbonyl, C₄-C₁₂ cycloalkoxycarbonyl, benzylloxycarbonyl or phenoxyloxycarbonyl, or is C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₃-C₁₂ alkynylcarbonyl, C₄-C₁₂ cycloalkylcarbonyl, benzylcarbonyl, phenylcarbonyl, C₂-C₁₂ alkoxycarbonyl, C₄-C₁₂ alkenyloxycarbonyl, C₄-C₁₂ alkenyloxycarbonyl, C₄-C₁₂ cycloalkoxycarbonyl, benzylloxycarbonyl or phenoxyloxycarbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

R₅ is (R₅₁)(R₅₂)(R₅₃)Si—, (R₅₁)(R₅₂)(R₅₃)Si—(C₁-C₁₂alkyl)—, (R₅₁)(R₅₂)(R₅₃)Si—(C₃-C₈cycloalkyl)—, (R₅₄O)(R₅₅O)(R₅₆O)Si—, (R₅₄O)(R₅₅O)(R₅₆O)Si—(C₁-C₁₂alkyl)— or (R₅₄O)(R₅₅O)(R₅₆O)Si—(C₃-C₈cycloalkyl)—; or

R₅ is C₁-C₆alkyl-B—C₁-C₁₂alkyl-, C₂-C₆alkenyl-B—C₁-C₁₂alkyl-, C₂-C₆alkynyl-B—C₁-C₁₂alkyl-, C₃-C₈cycloalkyl-B—C₁-C₁₂alkyl-, benzyl-B—C₁-C₁₂alkyl-, phenyl-B—C₁-C₁₂alkyl-, C₁-C₆alkyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkenyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phenyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₁₂cycloalkyl- or phenyl-B—C₃-C₁₂cycloalkyl-, wherein the group B is selected from —C(=O)—, —C(=S)—, —C(=NOR₅₉)—, —C(R₆₀)=NO—, —ON=C(R₆₀)—, —O—C(=O)—, —C(=O)—O—, —O—, —S—, —S(=O)—, —S(=O)₂—, —S(=O)—, —(NR₁₃)—, —S(=O)(R₁₄)—N—, —N=S(=O)(R₁₄)—, —N(R₆₂)—C(=O)—, —C(=O)—N(R₆₂)—, —N(R₆₂)—SO₂— or —SO₂—N(R₆₂)—; or

R₅ is C₁-C₆alkyl-B—C₁-C₁₂alkyl-, C₂-C₆alkenyl-B—C₁-C₁₂alkyl-, C₂-C₆alkynyl-B—C₁-C₁₂alkyl-, C₃-C₈cycloalkyl-B—C₁-C₁₂alkyl-, benzyl-B—C₁-C₁₂alkyl-, phenyl-B—C₁-C₁₂alkyl-, C₁-C₆alkyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkenyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkenyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phe-

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nyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₁₂cycloalkyl-, phenyl-B—C₃-C₁₂cycloalkyl-, all of which, in turn, are mono- to poly-substituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, formyl, C₂-C₆ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

R₅ is A-, A-(C₁-C₆alkyl)-, A-O-(C₁-C₆alkyl)-, A-(C₃-C₈alkenyl)-, A-O-(C₄-C₆alkenyl)-, A-(C₃-C₈alkynyl)-, A-O-(C₄-C₆alkynyl)-, A-(C₃-C₈cycloalkyl)- or A-O-(C₃-C₈cycloalkyl)-;

A is a three- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic, partially saturated or fully saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the three- to ten-membered ring system to be itself mono- or polysubstituted

A1) by substituents independently selected from the group consisting of

halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, carboxy, =O, =S, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₈ halocycloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₈ cycloalkyloxy, benzyl, benzyloxy, phenyl and phenoxy, where the benzyl, benzyloxy, phenyl and phenoxy, in turn, may be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

A2) by substituents independently selected from the group consisting of (R₁₄)S(=O)(=NR₁₃)—, (R₁₄)(R₁₅)S(=O)=N—, —Si(R₅₁)(R₅₂)(R₅₃)—, —NR₅₇R₅₈, —C(=O)NR₅₇R₅₈, —C(=S)NR₅₇R₅₈, HC(=NOR₅₉)—, (C₁-C₆alkyl)C(=NOR₅₉)—, (C₁-C₆haloalkyl)C(=NOR₅₉)—, (C₁-C₆alkyl)C(=NOR₅₉)C₁-C₆alkyl-, (C₁-C₆haloalkyl)C(=NOR₅₉)C₁-C₆alkyl-, N(C₁-C₆alkyl)aminosulfonyl and N,N-di(C₁-C₆alkyl)aminosulfonyl; or

A3) by substituents independently selected from the group consisting of

formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₃-C₇ alkenylcarbonyl, C₃-C₇ haloalkenylcarbonyl, C₄-C₉ cycloalkylcarbonyl, C₄-C₉ halocycloalkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₂-C₇ haloalkoxy carbonyl, C₃-C₇ alkenyloxy carbonyl, C₃-C₇ alkynyloxy carbonyl, C₄-C₉ cycloalkoxy carbonyl, C₂-C₇ alkylthiocarbonyl and benzyloxycarbonyl, and benzyloxycarbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

A4) by substituents independently selected from the group consisting of hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl,

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C₂-C₄ haloalkenyl, cyano, benzyl, phenyl, =C(R³⁶)₂, =N—OH, =N—O—C₁-C₄-alkyl, =N—O—C₃-C₄ alkenyl, =N—O—C₃-C₄ alkynyl, =N—O—C₁-C₄ haloalkyl, =N—O—C₃-C₄ haloalkenyl, =N—O-benzyl and =N—O-phenyl, wherein the =N—O-benzyl and =N—O-phenyl are optionally substituted by one or more group selected from the group consisting of halogen, methyl, halomethyl; or

R₅ is —N=C(R₈)(R₉); or

R₅ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇-alkylcarbonyl, C₂-C₇-alkoxy carbonyl, C₄-C₇-alkenylcarbonyl, C₄-C₇-alkoxy carbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂; or

R⁵ is selected from G¹, G², G³-G⁴, G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹², G¹³, G¹⁴, G¹⁵ and G¹⁶;

R₆ is selected from hydrogen and SH;

R₇ is hydrogen, halogen or C₁-C₄ alkyl;

R₈ and R₉, independently from each other, are hydrogen, halogen, cyano, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkoxy, formyl, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, carboxy, C₂-C₁₂ alkoxy carbonyl and C₄-C₁₂ alkenyloxy carbonyl, or C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₁-C₁₂ alkoxy, C₂-C₁₂ alkylcarbonyl, C₃-C₁₂ alkenylcarbonyl, C₂-C₁₂ alkoxy carbonyl and C₄-C₁₂ alkenyloxy carbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or R₈ and R₉, independently from each other, are the groups A-, A-O— or A-(C₁-C₆alkyl)-;

R₁₀ is H, C₁-C₄ alkyl, C₂-C₄ alkenyl or C₁-C₄ haloalkyl;

R₁₃ is hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, phenyl and benzyl, or is phenyl and benzyl mono- to polysubstituted by halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl or C₁-C₆ alkoxy;

R₁₄ and R₁₅, independently of each other, are C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl independently of each other, substituted by substituents selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

R₅₁, R₅₂, R₅₃, independently of each other, are halogen, cyano, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₃-C₈ cycloalkyl, C₅-C₈ cycloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, benzyl or phenyl;

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R₅₄, R₅₅, R₅₆, independently of each other, are C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₈ cycloalkyl, C₃-C₆ alkynyl, benzyl or phenyl;

R₅₇ and R₅₈, independently of each other, are hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, phenyl or benzyl, where phenyl or benzyl for their part may be mono- to polysubstituted on the phenyl ring by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy, or R₅₇ and R₅₈ together with their interconnecting nitrogen atom are aziridino, azetidino, pyrazolino, pyrazolidino, pyrrolino, pyrrolidino, imidazolino, imidazolidino, triazolino, tetrazolino, piperazino, piperidino, morpholino, thiomorpholino, each of which, in turn, may be mono- or polysubstituted by substituents selected from the group consisting of methyl, halogen, cyano;

R₅₉ is hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ alkenyl, C₃-C₆ haloalkenyl, C₃-C₆ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ halocycloalkyl, benzyl and phenyl, and benzyl and phenyl mono- to polysubstituted by halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl or C₁-C₆ alkoxy;

R₆₀ is hydrogen, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

R₆₂ is hydrogen, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₃-C₈ halocycloalkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl, benzyl or phenyl, or benzyl or phenyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy;

G¹ is a C₈-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl and cyano;

G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

G³ is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

G⁴ is C₃-C₁₂ cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl,

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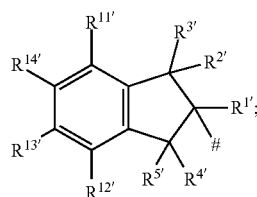
C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

G⁵ is C₃-C₇ cycloalkyl which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH₂(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, phenoxy, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

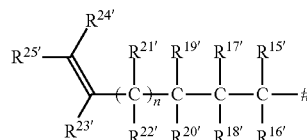
G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

G⁷ is methylene;

G⁸ is



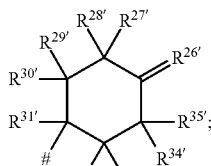
G⁹ is



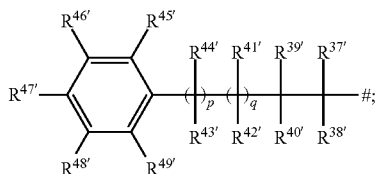
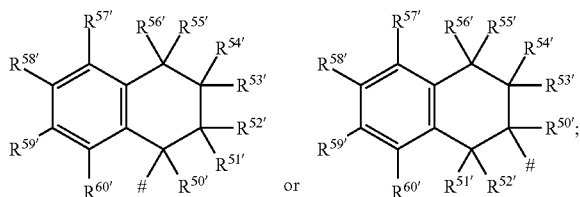
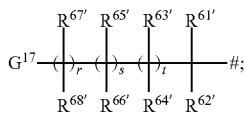
G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, phenyl, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl,

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C₁-C₆alkylsulfonyl, C₁-C₆ haloalkylsulfonyl, phenyl, 2-phenyl-ethynyl and 2-phenyl-ethyl;
 G¹¹ is methylene substituted by at least one group independently selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, CN, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;
 G¹² is



G¹³ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆alkenyl, C₂-C₆ haloalkenyl, C₁-C₆alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxy carbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;
 G¹⁴ is

G¹⁵ isG¹⁶ is

G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, N(R⁶⁹), O and S, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the five- to six-membered ring system

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to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R¹¹ is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

R², R³, R⁴ and R⁵ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

R¹¹, R¹², R¹³ and R¹⁴ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, phenyl, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, benzyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R¹⁵ and R¹⁶ are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

R²³, R²⁴ and R²⁵ are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

R²⁶ is C(R³⁶)₂, N—OH, N—O—C₁-C₄-alkyl, N—O—C₂-C₄-alkenyl, N—O—C₂-C₄ alkynyl, N—O—C₁-C₄ haloalkyl, N—O—C₂-C₄ haloalkenyl, N—O-benzyl, N—O-phenyl, N—O-halophenyl, O wherein the N—O-benzyl and N—O-phenyl may be substituted by one or more groups independently selected from the group consisting of halogen, methyl and halomethyl;

R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴ and R³⁵ are each independently selected from the group consisting of hydrogen, hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl and phenyl;

or R²⁸ and R²⁹ together with the two carbon atoms to which they are attached form a double bond;

each R³⁶ is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

R³⁷ and R³⁸ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³ and R⁴⁴ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

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$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkenyloxy, $\text{C}_3\text{-C}_6$ alkylloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonyl;

$R^{50'}$ is selected from the group consisting of hydrogen fluorine $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl;

$R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen fluorine $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl, $\text{C}_2\text{-C}_4$ alkoxy and $\text{C}_1\text{-C}_4$ alkylthio;

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO_2 , OH, SH, CHO, $\text{C}(=\text{O})\text{NH}_2$, $\text{C}(=\text{O})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{O})\text{N}(\text{CH}_3)_2$, $\text{C}(=\text{S})\text{NH}_2$, $\text{C}(=\text{S})\text{NH}(\text{CH}_3)$, $\text{C}(=\text{S})\text{N}(\text{CH}_3)_2$, SO_2NH_2 , $\text{SO}_2\text{NH}(\text{CH}_3)$, $\text{SO}_2\text{N}(\text{CH}_3)_2$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_2\text{-C}_6$ alkoxy, $\text{C}_2\text{-C}_6$ haloalkoxy, phenyl, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ haloalkynyl, $\text{C}_3\text{-C}_6$ alkenyloxy, $\text{C}_3\text{-C}_6$ alkynylloxy, $\text{C}_3\text{-C}_6$ cycloalkoxy, $\text{C}_3\text{-C}_6$ halocycloalkoxy, benzyloxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl and $\text{C}_1\text{-C}_6$ haloalkylsulfonyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

$R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen fluorine cyano $\text{C}_1\text{-C}_4$ alkyl and $\text{C}_1\text{-C}_4$ haloalkyl;

$R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl, $\text{C}_1\text{-C}_4$ alkoxy, $\text{C}_1\text{-C}_4$ haloalkoxy and $\text{C}_1\text{-C}_4$ alkylthio;

$R^{69'}$ is selected from hydrogen $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_3\text{-C}_4$ alkenyl and $\text{C}_1\text{-C}_4$ alkylcarboxy;

n is 0 or 1;

p and q are independently selected from 0 and 1; and

r , s and t are independently selected from 0 and 1;

or an agronomically acceptable salt/metallic complex/metalloidal complex/isomer/structural isomer/stereo-isomer/diastereoisomer/enantiomer/tautomer/N-oxide thereof;

and

component B) is a strobilurin fungicide, a sterol biosynthesis inhibitor, a triazole fungicide, a pro-triazole fungicide, a DMI fungicide, a SDHI fungicide, or a compound selected from the group consisting of Chlorothalonil, Fludioxonil, Cyprodinil, Mandipropamid, Fluazinam, Procymedone, Carbendazim, Abamectin, Clothianidin, Emamectin benzoate, Imidacloprid, Teffuthrin, Mefenoxam, Orocymedone, Thiamethoxam, Lambda-cyhalothrin, Gamma-cyhalothrin, Profenofos, Lufenuron, Diflufenuron, Cypermethrin, Novaluron, Bifenthrin, Methomyl, Chlopyrifos, Methamidophos, Endosulfan, Betacyfluthrin, Triflumuron, Teflubenzuron, Sulcotrione, Acephat, Glyphosate, Glufosinate, Mesotrione, Tembotrione, Sulcotrione, Auxins, Trinex-

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apac-ethyl, Prohexadione-Ca, Paclobutrazol, Acibenzolar-S-methyl, Methyl-Jasmonate, Cis-Jasmone, Manganese, Cyflufenamid, Tebufloquin and Copper.

2. A fungicidal composition according to claim 1, wherein component A) is a compound of formula (I) wherein, R_1 and R_2 are each independently selected from hydrogen, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_3\text{-C}_4$ alkenyl and $\text{C}_3\text{-C}_4$ alkynyl;

or R_1 and R_2 together with the nitrogen atom to which they are connected form pyrrolidine or piperidine;

R_3 represents hydrogen, halogen, cyano, mercapto, hydroxy, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl, $\text{C}_2\text{-C}_4$ alkenyl, $\text{C}_2\text{-C}_4$ haloalkenyl, $\text{C}_2\text{-C}_4$ alkynyl, $\text{C}_1\text{-C}_4$ alkoxy, $\text{C}_1\text{-C}_4$ haloalkoxy, $\text{C}_3\text{-C}_6$ cycloalkyl, amino, $\text{C}_1\text{-C}_2$ alkylamino, di($\text{C}_1\text{-C}_6$ alkyl)amino, pyrrolidino, imidazolino, triazolino, tetrazolino, formyl, $\text{C}_2\text{-C}_5$ alkylcarbonyl, $\text{C}_2\text{-C}_5$ haloalkylcarbonyl, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyl, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfonyl or $\text{C}_1\text{-C}_6$ hydroxyalkyl;

R_4 represents hydrogen, halogen, cyano, amino, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_4$ alkenyl, $\text{C}_2\text{-C}_4$ haloalkenyl, $\text{C}_1\text{-C}_4$ alkoxy, $\text{C}_1\text{-C}_4$ haloalkoxy, $\text{C}_1\text{-C}_4$ alkylthio, $\text{C}_1\text{-C}_4$ alkylsulfanyl, $\text{C}_1\text{-C}_4$ alkylsulfonyl, methylamino or dimethylamino;

R_5 represents hydrogen, $\text{C}_1\text{-C}_{12}$ alkylsulfanyl, $\text{C}_1\text{-C}_{12}$ alkyl, $\text{C}_3\text{-C}_{12}$ alkenyl, $\text{C}_3\text{-C}_{12}$ alkynyl, or is $\text{C}_1\text{-C}_{12}$ alkyl, $\text{C}_2\text{-C}_{12}$ alkenyl, $\text{C}_2\text{-C}_{12}$ alkynyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, azido, formyl, $\text{C}_2\text{-C}_7$ alkylcarbonyl, $\text{C}_2\text{-C}_7$ haloalkylcarbonyl, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl and $\text{C}_1\text{-C}_6$ alkylsulfonyl; or

R_5 is $(R_{51})(R_{52})(R_{53})\text{Si}-$, $(R_{51})(R_{52})(R_{53})\text{Si}-(\text{C}_1\text{-C}_{12}\text{alkyl})-$, $(R_{51})(R_{52})(R_{53})\text{Si}-(\text{C}_3\text{-C}_8\text{cycloalkyl})-$, $(R_{54}\text{O})(R_{55}\text{O})(R_{56}\text{O})\text{Si}-$, $(R_{54}\text{O})(R_{55}\text{O})(R_{56}\text{O})\text{Si}-(\text{C}_1\text{-C}_{12}\text{alkyl})-$ or $(R_{54}\text{O})(R_{55}\text{O})(R_{56}\text{O})\text{S}(\text{C}_3\text{-C}_8\text{cycloalkyl})-$; or

R_5 is $\text{C}_1\text{-C}_6$ alkyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_2\text{-C}_6$ alkenyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_2\text{-C}_6$ alkynyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_3\text{-C}_8$ cycloalkyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, benzyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, phenyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_1\text{-C}_6$ alkyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_2\text{-C}_6$ alkenyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_2\text{-C}_6$ alkynyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_3\text{-C}_8$ cycloalkyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, benzyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, phenyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_1\text{-C}_6$ alkyl-B- $\text{C}_2\text{-C}_{12}$ alkynyl-, $\text{C}_2\text{-C}_6$ alkenyl-B- $\text{C}_2\text{-C}_{12}$ alkynyl-, $\text{C}_2\text{-C}_6$ alkynyl-B- $\text{C}_2\text{-C}_{12}$ alkynyl-, $\text{C}_3\text{-C}_8$ cycloalkyl-B- $\text{C}_2\text{-C}_{12}$ alkynyl-, benzyl-B- $\text{C}_2\text{-C}_{12}$ alkynyl-, phenyl-B- $\text{C}_2\text{-C}_{12}$ alkynyl-, $\text{C}_1\text{-C}_6$ alkyl-B- $\text{C}_3\text{-C}_8$ cycloalkyl-, $\text{C}_2\text{-C}_6$ alkenyl-B- $\text{C}_3\text{-C}_8$ cycloalkyl-, $\text{C}_2\text{-C}_6$ alkynyl-B- $\text{C}_3\text{-C}_8$ cycloalkyl-, $\text{C}_3\text{-C}_8$ cycloalkyl-B- $\text{C}_3\text{-C}_8$ cycloalkyl-, benzyl-B- $\text{C}_3\text{-C}_{12}$ cycloalkyl- or phenyl-B- $\text{C}_3\text{-C}_{12}$ cycloalkyl-, wherein the group B is selected from $-\text{C}(=\text{O})-$, $-\text{C}(=\text{S})-$, $-\text{C}(=\text{NOR}_{59})-$, $-\text{C}(\text{R}_{60})=\text{NO}-$, $-\text{ON}=\text{C}(\text{R}_{60})-$, $-\text{O}-\text{C}(=\text{O})-$, $-\text{C}(=\text{O})-\text{O}-$, $-\text{O}-$, $-\text{S}-$, $-\text{S}(=\text{O})-$, $-\text{S}(=\text{O})_2-$, $-\text{S}(=\text{O})(=\text{NR}_{13})-$, $-\text{S}(=\text{O})(\text{R}_{14})=\text{N}-$, $-\text{N}=\text{S}(=\text{O})(\text{R}_{14})-$, $-\text{N}(\text{R}_{62})-\text{C}(=\text{O})-$, $-\text{C}(=\text{O})-\text{N}(\text{R}_{62})-$, $-\text{N}(\text{R}_{62})-\text{SO}_2-$ or $-\text{SO}_2-\text{N}(\text{R}_{62})-$; or

R_5 is $\text{C}_1\text{-C}_6$ alkyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_2\text{-C}_6$ alkenyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_2\text{-C}_6$ alkynyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_3\text{-C}_8$ cycloalkyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, benzyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, phenyl-B- $\text{C}_1\text{-C}_{12}$ alkyl-, $\text{C}_1\text{-C}_6$ alkyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_2\text{-C}_6$ alkenyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_2\text{-C}_6$ alkynyl-B- $\text{C}_2\text{-C}_{12}$ alkenyl-, $\text{C}_3\text{-C}_8$ cycloalkyl-

B—C₂-C₁₂alkenyl-, benzyl-B—C₂-C₁₂alkenyl-, phenyl-B—C₂-C₁₂alkenyl-, C₁-C₆alkyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkenyl-B—C₂-C₁₂alkynyl-, C₂-C₆alkynyl-B—C₂-C₁₂alkynyl-, C₃-C₈cycloalkyl-B—C₂-C₁₂alkynyl-, benzyl-B—C₂-C₁₂alkynyl-, phenyl-B—C₂-C₁₂alkynyl-, C₁-C₆alkyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkenyl-B—C₃-C₈cycloalkyl-, C₂-C₆alkynyl-B—C₃-C₈cycloalkyl-, C₃-C₈cycloalkyl-B—C₃-C₈cycloalkyl-, benzyl-B—C₃-C₁₂cycloalkyl-, phenyl-B—C₃-C₁₂cycloalkyl-, all of which, in turn, are mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, formyl, C₂-C₆ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

R₅ is selected from A-, A-(C₁-C₆alkyl)-, A-O-(C₁-C₆alkyl)-, A-(C₃-C₆alkenyl)-, A-O-(C₄-C₆alkenyl)-, A-(C₃-C₆alkynyl)-, A-O-(C₄-C₆alkynyl)-, A-(C₃-C₈cycloalkyl)- and A-O-(C₃-C₈cycloalkyl)-;

A is a three- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic, partially saturated or fully saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the three- to ten-membered ring system to be itself mono- or polysubstituted

A1) by substituents independently selected from the group consisting of

halogen, cyano, nitro, hydroxy, mercapto, nitro, azido, formyl, carboxy, =O, =S, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₈ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₈ halocycloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₈ cycloalkyloxy, C₃-C₈ halocycloalkyloxy, C₃-C₈ cycloalkenyloxy, C₃-C₈ halocycloalkenyloxy, benzyl, benzyloxy, phenyl and phenoxy, where the benzyl, benzyloxy, phenyl and phenoxy, in turn, may be mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, nitro, hydroxy, mercapto, amino, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl and C₁-C₆ alkylsulfonyl; or

A3) by substituents independently selected from the group consisting of

formyl, C₂-C₇ alkylcarbonyl, C₂-C₇ haloalkylcarbonyl, C₃-C₇ alkenylcarbonyl, C₃-C₇ haloalkenylcarbonyl, C₄-C₉ cycloalkylcarbonyl, C₂-C₇ alkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₄-C₉ cycloalkoxy carbonyl and benzyloxycarbonyl, and benzyloxycarbonyl mono- to polysubstituted by substituents independently selected from the group consisting of halogen, cyano, hydroxy, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ alkoxy; or

A4) by substituents independently selected from the group consisting of hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl, phenyl, =C(R³⁶)₂, =N—OH, =N—O—C₁-C₄alkyl, =N—O—C₃-C₄alkenyl, =N—O—C₃-C₄alkynyl, =N—O—C₁-C₄haloalkyl, =N—O—C₃-C₄haloalkenyl, =N—O—benzyl and =N—O-phenyl, wherein the =N—O-benzyl and =N—O-phenyl are optionally substituted by one or more group selected from the group consisting of halogen, methyl, halomethyl; or

R₅ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O, S or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

R₆ is hydrogen;

R₇ is hydrogen or C₁-C₄ alkyl.

3. A fungicidal composition according to claim 1, wherein component A) is a compound of formula (I) wherein R₁ and R₂ are each independently selected from hydrogen and C₁-C₄ alkyl;

or R₁ and R₂ together with the nitrogen atom to which they are connected form pyrrolidine or piperidine;

R₃ represents hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, amino, C₁-C₂ alkylamino, di(C₁-C₆alkyl)amino, pyrrolidino, imidazolino, triazolino, formyl, phenyl, C₂-C₄ alkylcarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl or C₁-C₆ hydroxyalkyl;

R₄ is selected from fluorine, chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ alkenyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₃-C₆ cycloalkyl;

R₅ is selected from G¹, G², G³-G⁴, G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹², G¹³, G¹⁴, G¹⁵ and G¹⁶;

R₆ is hydrogen;

R₇ is selected from hydrogen and C₁-C₄ alkyl;

G¹ is a C₈-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl and cyano;

G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynyloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

G³ is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

G⁴ is C₃-C₁₂ cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl,

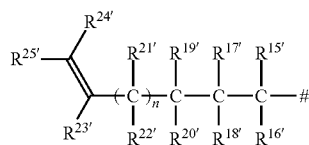
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C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

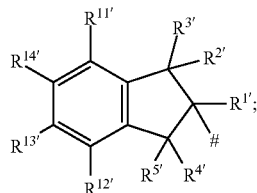
G^5 is C_3 - C_7 cycloalkyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO_2 , OH, SH, CHO, COOH, tri(C_1 - C_6 -alkyl)silyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-CH(CH_3)-CH_2-CH_2-CH_3$, $-CH-CH(CH_3)-CH_2-CH_3$, $-CH_2-CH_2-CH(CH_3)-CH_3$, $-CH_2-CH_2-CH(CH_3)_2$, $-CH(CH_3)-CH(CH_3)_2$, C_2 - C_6 haloalkyl, C_3 - C_6 cycloalkyl, C_3 - C_6 halocycloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 -alkenyloxy, C_2 - C_7 alkylcarbonyl, C_2 - C_7 alkoxycarbonyl, C_4 - C_7 alkenyloxycarbonyl, C_4 - C_7 alkynyloxycarbonyl, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfanyl, C_1 - C_6 alkylsulfonyl, phenoxy, $-C(=O)NH_2$, $-C(=O)NH(CH_3)$, $-C(=O)N(CH_3)_2$ and $-C(=S)NH_2$;

G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonfyl and C₁-C₆ haloalkylsulfonfyl;

G⁷ is methylene:

 G^8 is

G^9 is

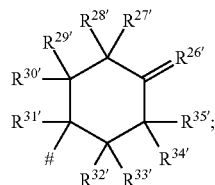


G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ haloalkoxy, phenyl, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ haloalkylsulfinyl, C₁-C₆

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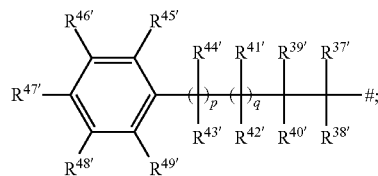
alkylsulfonyl, C₁-C₆ haloalkylsulfonyl, phenyl, 2-phenyl-ethynyl and 2-phenyl-ethyl;

G¹¹ is methylene substituted by at least one group independently selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, CN, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

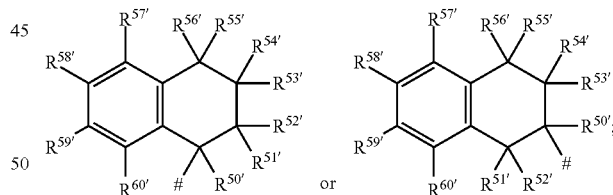
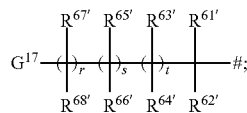
 G^{12} is

G¹³ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, COOH, tri(C₁-C₆-alkyl)silyl, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ haloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₇ alkylcarbonyl, C₂-C₇ alkoxycarbonyl, C₄-C₇ alkenyloxycarbonyl, C₄-C₇ alkynylloxycarbonyl, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, =O, —C(=O)NH₂, —C(=O)NH(CH₃), —C(=O)N(CH₃)₂ and —C(=S)NH₂;

G^{14} is



G^{15} is

 G^{16} is

G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, N(R⁶⁹), O and S, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the five- to six-membered ring system

to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{1'} is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

R², R³, R⁴ and R⁵ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

R¹¹, R¹², R¹³ and R¹⁴ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, phenyl, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, benzyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{15'} and R^{16'} are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl and C₃-C₆ cycloalkyl;

each R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are selected independently of each other, from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₃-C₆ cycloalkyl;

R²³, R²⁴ and R²⁵ are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

R^{26'} is C(R^{36'})₂, N—OH, N—O—C₁-C₄-alkyl, N—O—C₂-C₄-alkenyl, N—O—C₂-C₄ alkynyl, N—O—C₁-C₄ haloalkyl, N—O—C₂-C₄ haloalkenyl, N—O-benzyl, N—O-phenyl, N—O-halophenyl, O wherein the N—O-benzyl and N—O-phenyl may be substituted by one or more groups independently selected from the group consisting of halogen, methyl and halomethyl;

R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴ and R³⁵ are each independently selected from the group consisting of hydrogen, hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, cyano, benzyl and phenyl;

or R²⁸ and R²⁹ together with the two carbon atoms to which they are attached form a double bond;

each R^{36'} is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

R³⁷ and R³⁸ are selected independently of each other from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³ and R⁴⁴ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸ and R⁴⁹ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R^{50'} is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl;

R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkoxy and C₁-C₄ alkylthio;

R⁵⁷, R⁵⁸, R⁵⁹ and R⁶⁰ are selected, independently of each other, from the group consisting of hydrogen, halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₂-C₆ alkoxy, C₂-C₆ haloalkoxy, phenyl, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, benzyloxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl; provided that at least one of R⁵⁷, R⁵⁸, R⁵⁹ and R⁶⁰ is not hydrogen;

R⁶¹ and R⁶² are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C₁-C₄ alkyl and C₁-C₄ haloalkyl;

R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷ and R⁶⁸ are selected independently of each other from the group consisting of hydrogen, halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy and C₁-C₄ alkylthio;

R⁶⁹ is selected from hydrogen, C₁-C₄ alkyl, C₃-C₄ alkenyl and C₁-C₄ alkylcarboxy;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r, s and t are independently selected from 0 and 1.

4. A fungicidal composition according to claim 1, wherein component A) is a compound of formula (I) wherein R₁ and R₂ are each C₁-C₄ alkyl;

R₃ represents hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfanyl or C₁-C₄ alkylsulfonyl;

R₄ is selected from methyl, ethyl, methoxy, fluorine and chlorine;

R₆ is hydrogen;

R₇ is hydrogen or C₁-C₄ alkyl.

5. A fungicidal composition according to claim 1, wherein component A) is a compound of formula (I) wherein R₁ and R₂ are each independently selected from methyl, ethyl and isopropyl;

R₃ represents hydrogen, halogen, C₁-C₄ alkyl, C₁-C₄ haloalkyl, cyclopropyl, ethynyl or C₁-C₄ alkoxy;

R₄ is selected from methyl, methoxy, fluorine and chlorine;

R₆ is hydrogen;

R₇ is hydrogen.

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6. A fungicidal composition according to claim 1, wherein component A) is a compound of formula (I) wherein

R₁ is methyl;

R₂ is ethyl;

R₃ is selected from hydrogen, bromine, iodine, methyl, CHF₂, cyclopropyl, ethynyl and methoxy;

R₄ is methyl;

R₆ is hydrogen;

R₇ is hydrogen.

7. A fungicidal composition according to claim 3, wherein component A) is a compound of formula (I) wherein R₅ is selected from G¹, G², G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹², G¹⁴, G¹⁵ and G¹⁶.

8. A fungicidal composition according to claim 3, wherein component A) is a compound of formula (I) wherein R₅ is selected from G², G⁵, G⁶-G⁷, G⁸, G⁹, G¹⁰-G¹¹, G¹⁴ and G¹⁶.

9. A fungicidal composition according to claim 3, wherein component A) is a compound of formula (I) wherein R₅ is selected from G², G⁵, G⁸ and G¹⁰-G¹¹.

10. A fungicidal composition according to claim 3, wherein component A) is a compound of formula (I) wherein G¹ is a C₉-C₁₀ fused bicyclic ring system which may be saturated or comprise one carbon-carbon double bond and is optionally substituted by one or more groups independently selected from C₁-C₄ alkyl, fluorine, methoxy and C₁-C₄ fluoroalkyl;

G² is C₃-C₆ cycloalkenyl, which is optionally substituted by one or more groups independently selected from halogen, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio;

G³ is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₁-C₄ fluoroalkyl, C₁-C₄ alkoxy and halogen;

G⁴ is C₅-C₆ cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, halogen and cyano, wherein the alkyl groups are optionally substituted by one or more halogen;

G⁵ is C₃-C₇ cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, —CH(CH₃)—CH₂—CH₂—CH₃, —CH—CH(CH₃)—CH₂—CH₃, —CH₂—CH₂—CH(CH₃)—CH₃, —CH₂—CH₂—CH(CH₃)₂, —CH(CH₃)—CH(CH₃)₂, C₂-C₆ haloalkyl, C₁-C₆ alkoxy, C₃-C₄-alkenyloxy, phenoxo and C₁-C₆ alkylthio;

G⁶ is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ alkynyloxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfanyl and C₁-C₆ alkylsulfonyl;

G¹⁰ is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, OH, SH, CHO, methyl, ethyl, n-propyl, iso-propyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃, CF₂—CF₃,

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cyclopropyl, CH=CH₂, C(CH₃)=CH₂, CH=CH(CH₃), C(CH₃)=CH(CH₃)₂, CH=C(CH₃)₂, C(CH₃)=C(CH₃)₂, CH=CF₂, CH=CCl₂, C≡CH, methoxy, ethoxy, iso-propyloxy, phenyl, OCHF₂, OCH₂—C≡CH, OCH(CH₃)—C≡CH, SCH₃, SCH₂CH₃, S(=O)CH₃, S(=O)CH₂CH₃, S(=O)₂CH₃ and S(=O)₂CH₂CH₃;

G¹¹ is methylene substituted by at least one group independently selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

G¹³ is a C₈-C₁₁ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy, C₁-C₆ alkylthio and =O;

G¹⁷ is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, N(R⁶⁹), O and S, it not being possible for each ring system to contain —O—O—, —S—S— and —O—S— fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, NO₂, OH, SH, CHO, C(=O)NH₂, C(=O)NH(CH₃), C(=O)N(CH₃)₂, C(=S)NH₂, C(=S)NH(CH₃), C(=S)N(CH₃)₂, SO₂NH₂, SO₂NH(CH₃), SO₂N(CH₃)₂, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₃-C₆ alkenyloxy, C₃-C₆ haloalkenyloxy, C₃-C₆ alkynyloxy, C₃-C₆ cycloalkoxy, C₃-C₆ halocycloalkoxy, C₁-C₆ alkylthio, C₁-C₆ haloalkylthio, C₁-C₆ alkylsulfanyl, C₁-C₆ haloalkylsulfanyl, C₁-C₆ alkylsulfonyl and C₁-C₆ haloalkylsulfonyl;

R¹ is selected from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl and C₁-C₄ fluoroalkyl;

R², R³, R⁴ and R⁵ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ alkylthio;

R¹¹, R¹², R¹³ and R¹⁴ are selected, independently of each other, from the group consisting of hydrogen, cyano, halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ alkoxy and C₁-C₆ alkylthio;

R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹ and R²² are independently selected from the group consisting of hydrogen, halogen, methyl, ethyl, isopropyl, CH₂F, CHF₂, CF₃, CHF—CH₃, CF₂—CH₃ and CF₂CF₃;

R²³, R²⁴ and R²⁵ are independently selected from the group consisting of hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₃-C₆ halocycloalkyl and C₁-C₄ alkylthio;

R²⁶ is N—OH, N—O—C₁-C₄ alkyl, N—O—C₂-C₄ alkenyl, N—O—C₂-C₄ alkynyl, N—O—C₁-C₄ haloalkyl, N—O—C₂-C₄ haloalkenyl, N—O-benzyl, N—O-phenyl, N—O-halophenyl, O or C(R³⁶)₂;

R²⁷, R²⁸, R²⁹, R³⁰, R³¹, R³², R³³, R³⁴ and R³⁵ are each independently selected from the group consisting of hydrogen, hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy and halogen;

or R²⁸ and R²⁹ together with the two carbon atoms to which they are attached form a double bond;

each R³⁶ is independently selected from hydrogen, halogen and C₁-C₄ alkyl;

R³⁷, R³⁸, R³⁹, R⁴⁰, R⁴¹, R⁴², R⁴³ and R⁴⁴ are selected independently of each other from a group consisting of

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hydrogen, halogen, methyl, ethyl, isopropyl, monofluoromethyl, polyfluoromethyl, monofluoroethyl, and polyfluoroethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, ethoxy, difluoromethoxy, trifluoromethoxy, methylthio, methylsulfinyl and methylsulfonyl;

$R^{50'}$ is selected from the group consisting of hydrogen, fluorine, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl;

$R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_2 - C_4 alkoxy and C_1 - C_4 haloalkoxy;

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, cyano, halogen, C_1 - C_6 alkyl and C_1 - C_6 haloalkyl;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

$R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C_1 - C_4 alkyl and C_1 - C_4 haloalkyl;

$R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 haloalkoxy;

$R^{69'}$ is selected from hydrogen, C_1 - C_4 alkyl and C_1 - C_4 alkylcarboxy;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r and s are 0 and t is 1 or 0.

11. A fungicidal composition according to claim 3, wherein component A) is a compound of formula (I) wherein G^1 is a saturated C_{10} fused bicyclic ring system which is optionally substituted by one or more groups independently selected from C_1 - C_4 alkyl, fluorine, methoxy and C_1 - C_4 fluoroalkyl;

G^2 is a C_5 - C_6 cycloalkenyl group optionally substituted by one or more fluorine atoms;

G^3 is phenyl, which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, CHF_2 , CF_3 , C_1 - C_4 alkoxy and halogen;

G^4 is C_5 - C_6 cycloalkyl which is optionally substituted by one or more groups independently selected from hydroxyl, C_1 - C_4 alkyl, C_2 - C_4 alkenyl, C_2 - C_4 alkynyl, C_1 - C_4 alkoxy and halogen;

G^5 is C_5 - C_6 cycloalkyl, which is substituted by one or more groups independently selected from ethyl, n-propyl, isopropyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-CH(CH_3)-CH_2-CH_2-CH_3$, $-CH-CH(CH_3)-CH_2-CH_3$, $-CH_2-CH_2-CH(CH_3)-CH_3$, $-CH_2-CH_2-CH(CH_3)_2$, $-CH(CH_3)-CH(CH_3)_2$ and C_2 - C_6 haloalkyl;

G^6 is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more groups independently selected from halogen, CN, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl and C_1 - C_4 alkoxy;

G^7 is methylene;

G^{10} is phenyl, which is optionally substituted by one or more groups independently selected from hydrogen, halogen, CN, OH, methyl, ethyl, n-propyl, iso-propyl, CH_2F , CHF_2 , CF_3 , $CHF-CH_3$, CF_2-CH_3 , CF_2-CF_3 , $CH=CH_2$, $C(CH_3)=CH_2$, $CH=CH(CH_3)$, $C(CH_3)=CH(CH_3)$, $CH=C(CH_3)_2$, $C(CH_3)=C(CH_3)_2$,

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$CH=CF_2$, $CH=CCl_2$, $C\equiv CH$, methoxy, ethoxy, isopropoxy, phenyl and $OCHF_2$;

G^{11} is methylene substituted by at least one group independently selected from C_1 - C_4 alkyl, C_1 - C_4 haloalkyl and C_1 - C_4 alkoxy;

G^{13} is a C_8 - C_{11} spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 alkylthio and $=O$;

G^{17} is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 to 4 members selected from the group consisting of N, $N(R^{69'})$, O and S it not being possible for each ring system to contain $-O-O-$, $-S-S-$ and $-O-S-$ fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, phenyl or benzyl, wherein the phenyl or benzyl are optionally substituted by halogen, CN, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl;

$R^{1'}$ is selected from the group consisting of hydrogen, fluorine, methyl, CH_2F and CF_3 ;

$R^{2'}$, $R^{3'}$, $R^{4'}$ and $R^{5'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, CH_2F , CF_3 and methoxy;

$R^{11'}$, $R^{12'}$, $R^{13'}$ and $R^{14'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, CHF_2 , CF_3 and C_1 - C_4 alkoxy;

$R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$ and $R^{22'}$ are each independently selected from hydrogen, fluorine, methyl, ethyl, CH_2F , CHF_2 , CF_3 and isopropyl;

$R^{23'}$, $R^{24'}$ and $R^{25'}$ are independently selected from the group consisting of hydrogen, methyl, fluorine, chlorine, bromine, ethyl, CH_2F , CHF_2 , CF_3 and isopropyl;

$R^{26'}$ is selected from the group consisting of $N-OH$, $N-O-C_1-C_4$ alkyl, $N-O-C_2-C_4$ alkenyl, $N-O-C_2-C_4$ alkynyl, $N-O-C_1-C_4$ haloalkyl, $N-O-C_2-C_4$ haloalkenyl, $N-O$ -benzyl, $N-O$ -phenyl, $N-O$ -halophenyl, O, and $C(R^{36'})$;

$R^{27'}$, $R^{28'}$, $R^{29'}$, $R^{30'}$, $R^{31'}$, $R^{32'}$, $R^{33'}$, $R^{34'}$ and $R^{35'}$ are each independently selected from the group consisting of hydrogen, C_1 - C_4 alkyl and halogen;

or $R^{27'}$ and $R^{28'}$ together with the two carbon atoms to which they are attached form a double bond;

each $R^{36'}$ is independently selected from hydrogen, halogen and C_1 - C_4 alkyl;

$R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are independently selected from the group consisting of hydrogen, fluorine, methyl and trifluoromethyl;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, cyclopropyl, $C\equiv CH$, $CH=CH_2$, $C(CH_3)=CH_2$, CF_3 , CHF_2 , CH_2F , $-CHF-CH_3$, $-CF_2-CH_3$, methoxy, difluoromethoxy, trifluoromethoxy, ethoxy, methylthio, methylsulfinyl and methylsulfonyl;

$R^{50'}$, $R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are selected, independently of each other, from the group consisting of hydrogen, fluorine, methyl, CH_2F and CF_3 ;

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, C_1 - C_4 alkyl, CHF_2 and CF_3 ;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

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$R^{61'}$ and $R^{62'}$ are selected independently of each other from the group consisting of hydrogen, fluorine, methyl, ethyl, CHF_2 and CF_3 ;

$R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are selected independently of each other from the group consisting of hydrogen, fluoro, methyl, ethyl, methoxy, difluoromethoxy, trifluoromethoxy, CHF_2 and CF_3 ;

$R^{69'}$ is selected from hydrogen and $\text{C}_1\text{-C}_4$ alkyl;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r and s are 0 and t is 1 or 0.

12. A fungicidal composition according to claim 3, wherein component A) is a compound of formula (I) wherein G^1 is a saturated C_{10} fused bicyclic ring system;

G^2 is a $\text{C}_5\text{-C}_6$ cycloalkenyl group;

G^3 is phenyl;

G^4 is cyclohexyl or cyclopentyl;

G^5 is C_6 cycloalkyl, which is optionally substituted by one or more groups independently selected from ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, n-pentyl, $-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_2-\text{CH}_3$, $-\text{CH}-\text{CH}(\text{CH}_3)-\text{CH}_2-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_3$, $-\text{CH}_2-\text{CH}_2-\text{CH}(\text{CH}_3)_2$ and $-\text{CH}(\text{CH}_3)-\text{CH}(\text{CH}_3)_2$;

G^6 is phenyl, which must be substituted by at least one fluorine and is optionally further substituted by one or more methyl, bromine, iodine or chlorine;

G^7 is methylene;

G^{10} is phenyl, which is optionally substituted by one or more groups independently selected from halogen, CN, methyl, ethyl, n-propyl, iso-propyl, ethenyl, methoxy, ethoxy, iso-propyloxy, phenyl, CHF_2 , CF_3 , $\text{CHF}-\text{CH}_3$ and OCHF_2 ;

G^{11} is methylene substituted by at least one group independently selected from methyl, CF_3 and ethyl;

G^{13} is a $\text{C}_8\text{-C}_{11}$ spirobicyclic system containing 0, 1 or 2 O or N atoms, wherein there are no adjacent O atoms, which is optionally substituted by one or more groups independently selected from halogen, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ alkoxy and $=\text{O}$;

G^{17} is a five- to six-membered monocyclic heteroaromatic ring system which can contain 1 or 2 members selected from the group consisting of N, O and S, it not being possible for each ring system to contain $-\text{O}-\text{O}-$, $-\text{S}-\text{S}-$ and $-\text{O}-\text{S}-$ fragments, and it being possible for the five- to six-membered ring system to be itself mono- or polysubstituted by groups selected from the group consisting of halogen, CN, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl, $\text{C}_1\text{-C}_4$ alkoxy, $\text{C}_1\text{-C}_4$ haloalkoxy, phenyl or fluorophenyl;

$R^{1'}$, $R^{2'}$, $R^{3'}$, $R^{4'}$ and $R^{5'}$ are each hydrogen;

$R^{11'}$, $R^{12'}$, $R^{13'}$ and $R^{14'}$ are selected, independently of each other, from the group consisting of hydrogen, halogen, cyano, $\text{C}_1\text{-C}_4$ alkyl and $\text{C}_1\text{-C}_4$ alkoxy;

$R^{15'}$, $R^{16'}$, $R^{17'}$, $R^{18'}$, $R^{19'}$, $R^{20'}$, $R^{21'}$, $R^{22'}$, $R^{23'}$, $R^{24'}$ and $R^{25'}$ are each independently selected from hydrogen, methyl, ethyl and isopropyl;

$R^{26'}$ is $\text{N}-\text{OH}$, $\text{N}-\text{O}-\text{C}_1\text{-C}_4$ alkyl, $\text{N}-\text{O}-\text{C}_2\text{-C}_4$ alkenyl, $\text{N}-\text{O}-\text{C}_2\text{-C}_4$ alkynyl, $\text{N}-\text{O}-\text{C}_1\text{-C}_4$ haloalkyl, $\text{N}-\text{O}-\text{C}_2\text{-C}_4$ haloalkenyl, $\text{N}-\text{O}-\text{benzyl}$, $\text{N}-\text{O}-\text{phenyl}$, $\text{N}-\text{O}-\text{halophenyl}$, O and $\text{C}(\text{R}^{36'})$;

$R^{27'}$, $R^{28'}$, $R^{29'}$, $R^{30'}$, $R^{31'}$, $R^{32'}$, $R^{33'}$, $R^{34'}$ and $R^{35'}$ are each hydrogen or methyl;

or $R^{27'}$ and $R^{28'}$ together with the two carbon atoms to which they are attached form a double bond;

each $R^{36'}$ is independently selected from hydrogen, halogen and $\text{C}_1\text{-C}_4$ alkyl;

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$R^{37'}$, $R^{38'}$, $R^{39'}$, $R^{40'}$, $R^{41'}$, $R^{42'}$, $R^{43'}$ and $R^{44'}$ are hydrogen;

$R^{45'}$, $R^{46'}$, $R^{47'}$, $R^{48'}$ and $R^{49'}$ are independently selected from the group consisting of hydrogen, fluorine, chlorine, methyl, CF_3 , CHF_2 , CH_2F , methoxy, difluoromethoxy and trifluoromethoxy;

$R^{53'}$, $R^{51'}$, $R^{52'}$, $R^{53'}$, $R^{54'}$, $R^{55'}$ and $R^{56'}$ are each hydrogen;

$R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ are selected, independently of each other, from the group consisting of hydrogen and halogen;

provided that at least one of $R^{57'}$, $R^{58'}$, $R^{59'}$ and $R^{60'}$ is not hydrogen;

$R^{61'}$, $R^{62'}$, $R^{63'}$, $R^{64'}$, $R^{65'}$, $R^{66'}$, $R^{67'}$ and $R^{68'}$ are hydrogen;

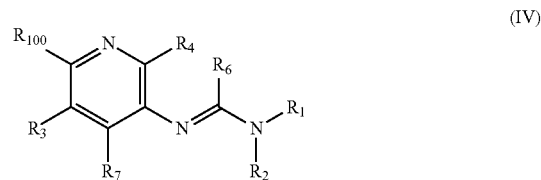
$R^{69'}$ is hydrogen;

n is 0 or 1;

p and q are independently selected from 0 and 1;

r , s and t are each 0.

13. A compound according to formula (IV)



wherein R_{100} is halogen, SH, $\text{C}_1\text{-C}_4$ alkylthio, $\text{C}_1\text{-C}_4$ alkylsulfanyl, $\text{C}_1\text{-C}_4$ alkylsulfonyle;

R_1 and R_2 are each independently selected from hydrogen, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_3\text{-C}_4$ alkenyl, $\text{C}_3\text{-C}_4$ alkynyl, $(\text{R}_{10})\text{carbonyl}$ and $(\text{R}_{10})\text{oxycarbonyl}$;

or R_1 and R_2 together with the nitrogen atom to which the are attached form a 5- or 6 membered cyclic group which may be saturated or unsaturated and may contain a further heteroatom selected from S or O;

R^3 represents hydrogen, halogen, cyano, nitro, mercapto, hydroxy, $-\text{C}(=\text{S})\text{NH}_2$, $-\text{SF}_5$, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ haloalkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_2\text{-C}_6$ haloalkynyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_3\text{-C}_6$ cycloalkyl amino, $\text{C}_1\text{-C}_2$ alkylamino, $\text{di}(\text{C}_1\text{-C}_6\text{alkyl})\text{amino}$, a 5-membered heterocycle containing 1-4 nitrogen atoms, piperidino, morpholino, thiomorpholino, formyl, hydroxycarbonyl, $\text{C}_2\text{-C}_7$ alkoxycarbonyl, $\text{C}_2\text{-C}_7$ haloalkoxycarbonyl, $\text{C}_4\text{-C}_7$ alkenyloxycarbonyl, $\text{C}_4\text{-C}_7$ haloalkenyloxycarbonyl, $\text{C}_2\text{-C}_7$ alkylcarbonyl, $\text{C}_2\text{-C}_7$ haloalkylcarbonyl, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl, $\text{C}_1\text{-C}_6$ alkylsulfonyle, $\text{C}_1\text{-C}_6$ haloalkylthio, $\text{C}_1\text{-C}_6$ haloalkylsulfanyl, $\text{C}_1\text{-C}_6$ haloalkylsulfonyle, $\text{C}_1\text{-C}_6$ haloalkylsulfonyle, $\text{C}_1\text{-C}_6$ hydroxyalkyl, phenyl or benzyl wherein the phenyl and benzyl are optionally substituted by one or more groups independently selected from the group consisting of halogen, cyano, hydroxy, mercapto, amino, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ haloalkyl, $\text{C}_1\text{-C}_6$ alkoxy, $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_1\text{-C}_6$ alkylthio, $\text{C}_1\text{-C}_6$ alkylsulfanyl and $\text{C}_1\text{-C}_6$ alkylsulfonyle;

R_4 represents hydrogen, halogen, cyano, amino, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_1\text{-C}_4$ haloalkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, $\text{C}_2\text{-C}_4$ alkenyl, $\text{C}_2\text{-C}_4$ alkynyl, $\text{C}_1\text{-C}_4$ alkoxy, $\text{C}_1\text{-C}_4$ haloalkoxy, $\text{C}_1\text{-C}_4$ alkylthio, $\text{C}_1\text{-C}_4$ alkylsulfanyl, $\text{C}_1\text{-C}_4$ alkylsulfonyle, methylamino or dimethylamino;

R_6 is selected from hydrogen and SH; and

R_7 is hydrogen, halogen or $\text{C}_1\text{-C}_4$ alkyl.

14. A method of controlling phytopathogenic diseases on useful plants or on propagation material thereof, which com-

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prises applying to the useful plants, the locus thereof or propagation material thereof a combination of components A) and B) in a synergistically effective amount according to claim 1 together with an inert carrier, and optionally an adjuvant.

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15. A fungicidal composition, comprising a combination of components A) and B) according to claim 1 together with an inert carrier, and optionally an adjuvant, wherein the weight ratio of A) to B) is between 100:1 and 1:6000.

16. A method of protecting natural substances of plant origin, which have been taken from their natural life cycle, and/or their processed forms, which comprises applying to said natural substances of plant and/or animal origin or their processed forms a combination of components A) and B) according to claim 1 in a synergistically effective amount.

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